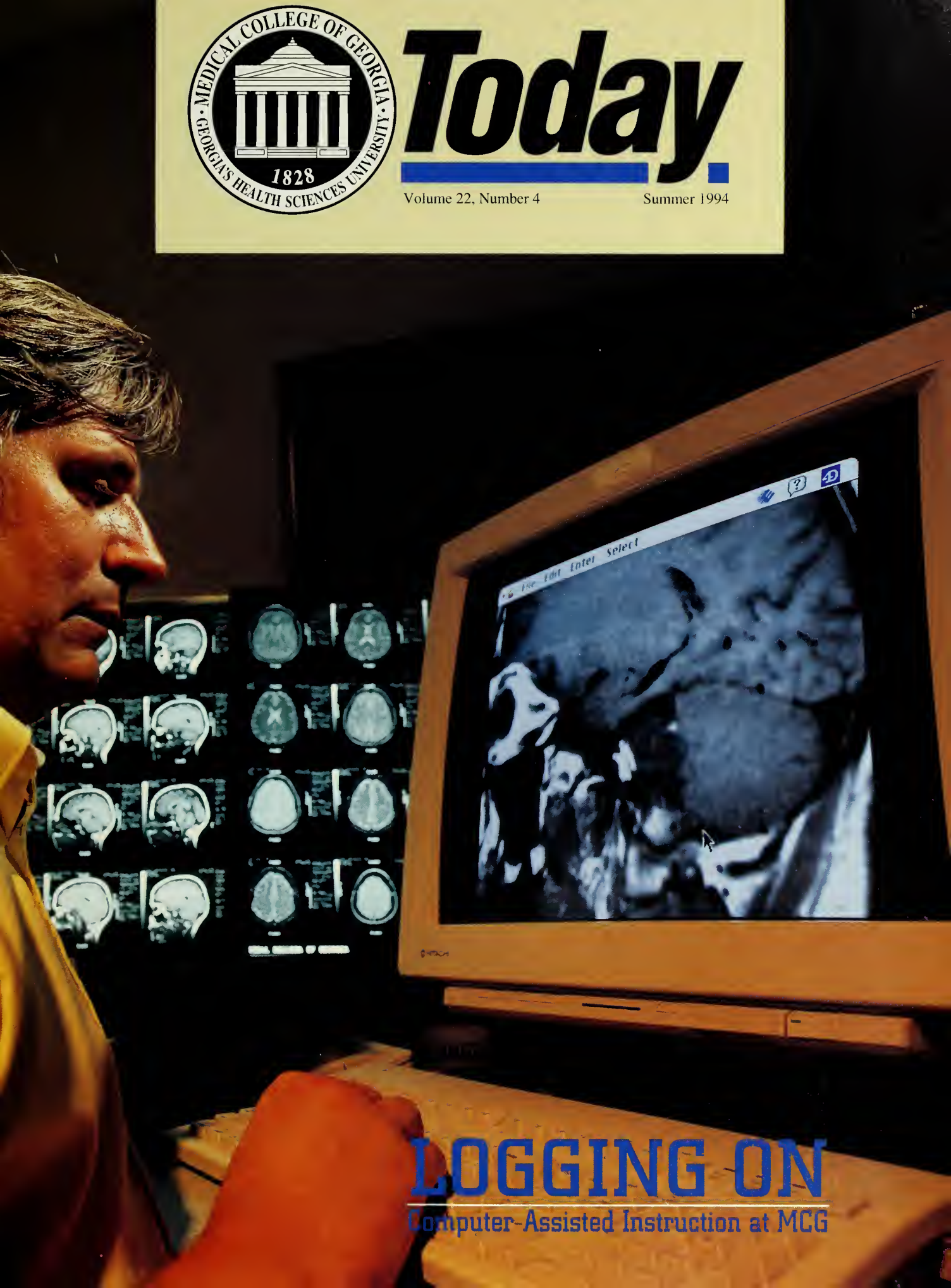
MEDICAL COLLEGE OF GEORGIA · GEORGIA'S HEALTH SCIENCES UNIVERSITY · 1828

Today

Volume 22, Number 4 Summer 1994



LOGGING ON

Computer-Assisted Instruction at MCG

GUESS WHAT WE CAN DO?

- Physician Professional Liability
- Hospital Professional Liability
- Managed Healthcare Liability
- Life Insurance
- Disability Insurance
- Major Medical
- Homeowners/Auto/Umbrella
- Estate Planning
- Office Packages/ Workers' Comp

Call us at 404-842-5600, or 800-282-4882.
Or write P.O. Box 52979, Atlanta, GA 30355-0979.

MAG MUTUAL INSURANCE AGENCY
MAG MUTUAL INSURANCE COMPANY

You Don't Just Own The Policy, You Own The Company

Medical College of Georgia Today
Volume 22, Number 4 Summer 1994

Introduction

The multimedia computer revolution has descended upon the Medical College of Georgia, with dramatic results. The technology is virtually transforming the way the university's students are being educated.

Professors need no longer struggle to explain to students the sound of an arrhythmic heart or the path of blood as it flows through the body. A computer displays such sights and sounds, plus much, much more. Read about how computers are revolutionizing the way future health-care professionals are taught.

Another ground-breaking effort at MCG is a new method of drug design based on DNA structure. Dr. Lawrence Hendry's fervor and dedication are growing as his work yields more and more promise. Read about the startling results of his work in this edition of *Medical College of Georgia Today*.

Medical College of Georgia Today frequently seeks out alumni who are advancing their fields, and this edition features psychiatrist Evan Torch. He focuses on such psychiatric problems as obsessive-compulsive disorder, and he credits his success largely to his education at MCG. Inside, he discusses how his mentors have influenced his work.

We also invite you to learn about a synthetic version of high-density lipoprotein, the body's "good" cholesterol. This product promises to provide reliable evidence of lung disease before a single symptom is present. The end result may well be life for patients who otherwise may have had no hope.

Contents

2 / Logging On
Computer-assisted instruction is transforming medical education at MCG.

6 / Teaching Goes High-Tech
Other examples of computer-assisted instruction on campus.

7 / More of a Good Thing
Research at the Medical College of Georgia suggests that man-made high-density lipoprotein helps prevent or minimize potentially life-threatening infections.

9 / AlumNews
News from the five alumni associations.

26 / A Breakthrough in Drug Design
An MCG researcher has developed a method of drug design that eliminates trial and error.

30 / A Meeting of Minds
Is psychiatry a study of the brain or of the mind? Dr. Evan Torch, a Medical College of Georgia School of Medicine alumnus, says both—and he's devoted his career to it.

MCG President: Francis J. Tedesco, M.D.
Executive Editor: James B. Osborne, Ed.D.
Director of Marketing and Public Relations: George H. Foster
Editor: Christine Hurley Deriso
Art Director: Brent D. Burch
Photographers: Phil Jones, Steve Thaxton, Will Willner

MCG Foundation Officers
President: H. Gordon Davis Jr., M.D.
First Vice President: William C. Collins, M.D.
Second Vice President: Virgle W. McEver Jr., M.D.
Secretary: Asbury Clark Robinson, M.D.
Treasurer: Harold S. Engler, M.D.
Executive Director: James B. Osborne, Ed.D.
Assistant Secretary-Treasurer: Larry Tyler

The Medical College of Georgia is the health sciences university of the University System of Georgia. Focusing on health-care education, research and patient care, the Augusta-based institution consists of MCG Hospital, more than 80 support clinics, statewide outreach programs and the Schools of Allied Health Sciences, Dentistry, Graduate Studies, Medicine and Nursing.

Medical College of Georgia Today is sponsored by grants from MCG Foundation, Inc. and the MCG School of Medicine Alumni Association. It is produced by the Divisions of Institutional Relations and Health Communication; Medical College of Georgia; Augusta, Georgia 30912. Advertising inquiries should be directed to Future First Publishing, (800) 999-4723, 2623 Sandy Plains Road, Marietta, Georgia 30066. Published quarterly, *MCG Today* is furnished to alumni and friends of MCG without charge. The appearance of advertisements in this publication does not constitute an endorsement by the Medical College of Georgia of the products or services advertised.

L · O · G · G · I

A Medical College of Georgia professor is combining advanced computer capabilities with traditional lectures and texts to revolutionize the way medical students are educated at MCG.

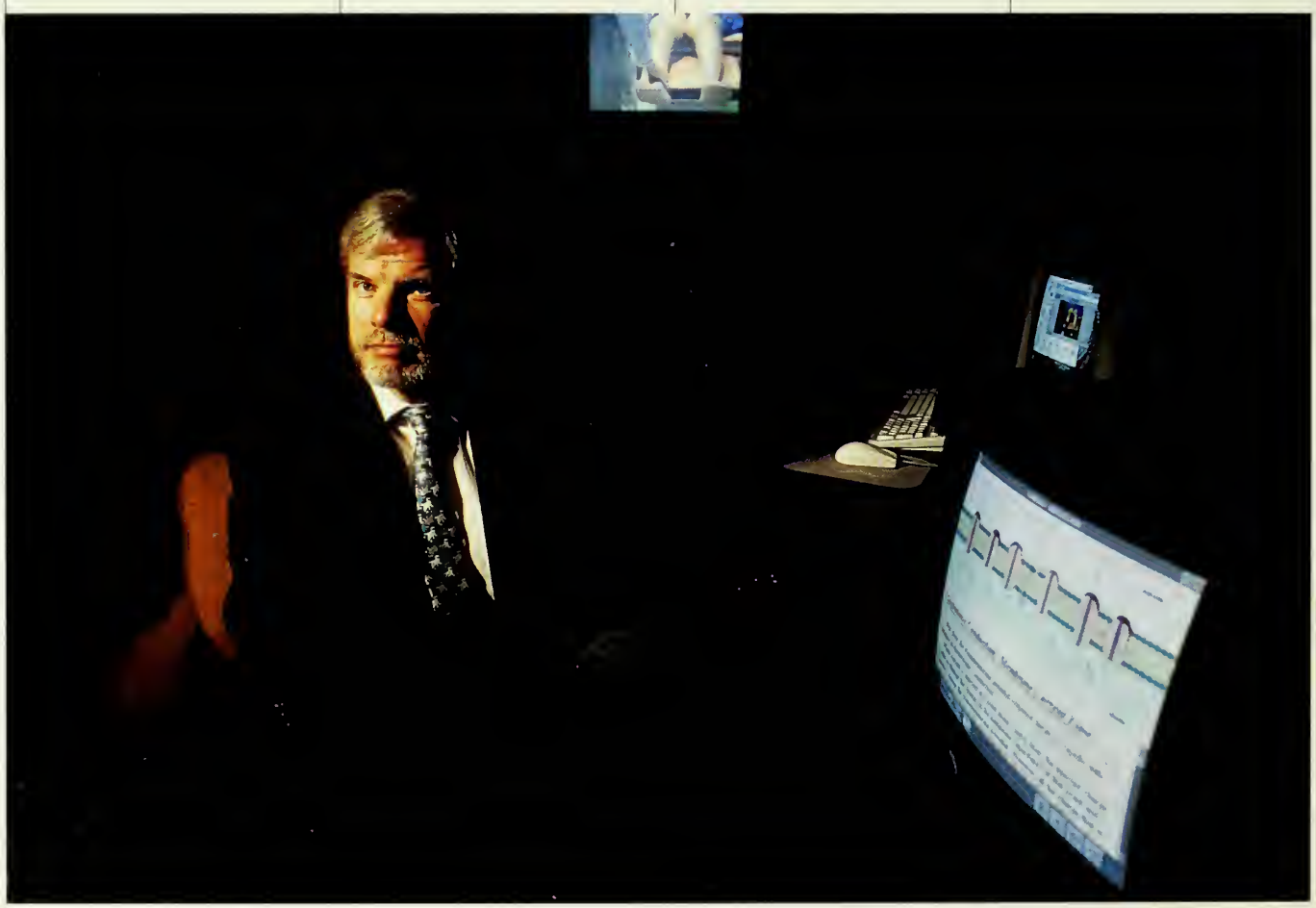
"We're creating a full multimedia textbook," said Dr. Thomas Nosek, professor of physiology and endocrinology at MCG. "We are working to create a more active learning environment for the students, one where they can be challenged at their own pace, can see for themselves if they understood the material and can learn when they are ready to. We're really moving toward reducing the time students spend passively in lecture and increasing the time they're actively involved in learning."

In 1988, Dr. Nosek began computerizing his medical physiology course as a teaching supplement. "I had seen a demonstration of an IBM program that allowed the display of text and graphics and linked it all together," Dr. Nosek said. "I could see the benefit of that in helping students organize information."

Dr. Nosek compiled a list of multiple-choice questions on the computer, then presented his program to a class in 1989. The program offered more information, based on the student's response—explaining why answers were incorrect, or elaborating on correct responses. Students could move at their own pace and quiz themselves on troublesome material. In the meantime, Dr. Nosek continued his lectures, encouraging the students to avail themselves of the library's computers to supplement their education.

"The students really responded favorably to it," Dr. Nosek said. "There were a lot of elements about it that really held their attention. They found it a useful learning resource." He surveyed the class and found that 82 percent used the computer program on their own time.

The project was such a success that Dr. Nosek was asked to present it at a 1990 meeting of the Association of American Medical Colleges. Dr. Gregory Eastwood, then



N · G · O · N

dean of MCG's School of Medicine, then asked him to expand the program to the entire medical physiology curriculum. In December 1991, the Department of Physiology and Endocrinology faculty formed the Computer Assisted Instruction Research and Development Group to meet the challenge. Group members are Dr. Nosek and Drs. Gary C. Bond, Allen Costoff, Robert E. Godt, Jack M. Ginsburg, Wendell F. Hofman, William J. Jackson, Thomas F. Ogle, Susan P. Porterfield, S. David Stoney Jr. and Vernon T. Wiedmeier. Drs. Maurice Levy and Lloyd Lewis collaborate as education experts; Dr. Janice A. Work is the associate editor of the textbook.

The project is funded by the School of Medicine, but the group recently prepared a grant proposal to supplement the funds.

Since the group's inception, the project has surpassed Dr. Nosek's wildest expectations. With the help of multimedia specialist Shawnee Sloop, medical illustrator Heather Kelley and secretary Della Dixon, the physiology faculty has implemented the advances of computer technology into its program.

Faculty members bring the text for their chapters to Ms. Sloop, who then works with them to incorporate various multimedia elements into the material. She also is responsible for designing the textbook's interface—the way the viewer can move around in the program—and creating a standardized method of presenting the information.

"I make sure that the material is presented in a consistent manner, that you can navigate through different chapters in the same way, that links and buttons are consistent," she said.

Ms. Sloop also serves as the group's trouble-shooter. "For instance, we're creating something that has to run on a lot of different computers. Just because it works here, on my machine, doesn't necessarily mean it will work on the laptops, or on a computer a student has at home, with different parts by different manufacturers. I try to work out these kinds of problems and make sure the program

Advertising Index

AFTCO Associates 27
Anderson Area Medical Center 32
Army Medical Reserve 29
Cellular One ..... *Inside Back Cover*
DeKalb Medical Center 28
Eastman Kodak Company 27
Georgia Army National Guard 32
Interim Physicians 6
Kaiser Permanente 32
MAG Mutual Insurance Company ..... *Inside Front Cover*
Medical College of Georgia Hospital and Clinics 25
Memorial Medical Center 28
NationsBank 3
Northeast Alabama Regional Medical Center 4
SmithKline Beecham Clinical Laboratories 29
Tallahassee Memorial Regional Medical Center 8
United States Air Force Health Professions 8
Word Zxpressed 4

Let's face it. With so many demands on your busy schedule, you may not have time to give your finances the attention they deserve.

Who Has Time For Banking?

That's where we can help. We're Professional & Executive Banking at NationsBank. And while we can't turn your crammed daily calendar into empty pages, we can take the hassle out of banking.

You'll work with one of our experienced bankers, who will meet with you at your convenience and personally assist you with your finances.

This banker will help you select the loan that's right for you and aggressively follow it through to completion. And to get the most value from the money you earn, your banker will help you choose among a variety of investment accounts.

Discover the convenience of Professional & Executive Banking. Call Mary Hill Gary at (706) 828-8372. Because while you may not have time for banking, we do.

NationsBank

NationsBank Corporation subsidiary banks are members FDIC Equal Housing Lenders. ©1993 NationsBank Corporation.

PRACTICE MADE PERFECT

INTRODUCING

WORDZXPRESSED™

TELEPHONE DICTATION
24 Hours a Day, 7 Days a Week

We have the perfect prescription for your busy practice. Our specialized telephone dictation service is just what the doctor ordered. Now you can create a document any time, anywhere with the touch of your phone. Simply call us from your office, home, car or any Touch-Tone phone and dictate chart notes, correspondence, referral letters or initial patient evaluations. We will turn your words into the document format you desire, and send it by telephone modem directly to your computer to be printed on your printer.

CALL FOR A FREE, NO OBLIGATION DEMONSTRATION IN YOUR OFFICE AND ASK ABOUT GETTING YOUR FIRST DOCUMENT FREE

In Atlanta 404-872-6079
State and Nationwide 1-800-872-6079

1100 Spring Street, N.W. • Suite 220
Atlanta, Georgia 30309-2824

can be used on these different setups."

The group has just completed the first phase of the project: typing physiology text into a computer, supplemented by graphics and some multimedia features. Each set of text is duplicated in a notebook so that students can highlight information and jot notes into the margins. The text is specifically tailored for MCG students and can be easily adapted to other medical courses, Dr. Nosek said.

The computerized textbook contains material traditionally found in textbooks—chapters of text, clinical cases, illustrations and graphs. But it also contains material that can't be put in traditional texts, such as animations explaining difficult concepts, simulations of physiological processes such as blood flow through the body and much more.

The computer also has questions at the end of each chapter, so students can test themselves on their grasp of the information. If a student answers a question incorrectly, the computer explains why the answer is wrong and then poses another question, eventually leading the student through the problem, if needed.

The textbook contains chapters on the cell membrane, muscles, cardiac physiology, respiratory physiology, endocrinology, gastrointestinal physiology, renal physiology and neurophysiology. Each chapter is written by the faculty member who teaches that section of the course.

"We have unbelievable potential," Dr. Nosek said. "What we're realizing is that this project may never end. We may keep upgrading it indefinitely."

The group's next challenge—phase two—is to add more original illustrations and multimedia features into the program. Each illustration is designed to complement the text; one set of graphics, for instance, illustrates and labels the body's muscles and tendons. Ms. Sloop is further enhancing the program by incorporating more sound and motion. For instance, professors need no longer try to explain variations in heart beats by verbal explanations alone. Students can prompt the computer to project the sound of a healthy or arrhythmic heart. Faculty members have identified specific multimedia features they want implemented into the program.

The group also is adapting the program to accommodate different levels of advancement. For instance, the text includes certain terms that may require further explanation. If so, students may click on the term in question, signaling the computer to display a full explanation ("pop-up definitions"), then return to the text when

Lovely northeast Alabama town with population of approximately 40,000 offers excellent quality of life setting with very low cost of living. Large state-of-the-art regional hospital with service area of 200,000. Seeking physicians in the following specialties.

Internal Medicine
Family Practice
Cardiology
Endocrinology
Urology
Pediatrics
Psychiatry
Pulmonology
Rheumatology

Please contact Ms. Sharel Laidig, ✪ **Northeast Alabama Regional Medical Center**, P. O. Box 2208, Anniston, AL 36202, or call (205)235-5253.

prompted. Students who don't require the explanation may simply continue with the original text.

Students desiring more advanced knowledge can click on "asides"—information not vital to the course but pertinent to the topic. Whether expanding on remedial or advanced information, "it doesn't pull away from the flow," Dr. Nosek said.

"I create the scripts to incorporate illustrations, animations, digitized movies and sounds into the chapter," Ms. Sloop said. "I program the pop-up definitions for words that need them, and design and program the interface for the questions available at the end of chapters in collaboration with the professors."

The faculty has begun using the program in its classes.

"It seems to be going quite well," Dr. Nosek said. "And I feel it takes some pressure off me. I don't feel I have to cover everything in lectures. [The students'] performance on tests shows that they get a very good grasp of the information. And faculty is available to them if they have any problems."

The class meets daily, and students also are able to learn and review material at their own pace with 10 color computers in the library, donated by NEC Technologies. Approximately 50 students in the class own a computer; the department provides textbook chapters on disk for home installation to students who request it, making study even more convenient.

Dr. Nosek hopes to interest computer manufacturers in selling computers to students in bulk, alleviating the problem of the library's limited resources.

"Our hope is to eventually make it possible for every student to have a similar quality notebook computer for their personal use," Dr. Nosek said. "One thing this would accomplish is allowing the students to learn when they want to, instead of having to get the material during lecture," he said.

Students' reactions to the computerized textbook are generally positive, and their opinions are taken into consideration as the group continues to develop the project.

Dr. Lloyd Lewis, coordinator of curriculum affairs, surveyed students after they completed Dr. Nosek's section of the course and summarized their responses. Anonymous opinions ranged from enthusiasm to wariness; for instance, one student commented that he considered computers in the classroom a distraction. Some students mentioned difficulty gaining access to the computers in the library when they wanted to use them. Overall, however, Dr. Lewis found that the students thought the computer was a useful supplement to lectures, and they especially found the computerized questions with answers and explanations helpful. Many asked that the question sections be expanded.

Dr. Nosek stressed that computer-assisted instruction will never replace the need for teachers. He noted that computers, despite their capabilities, cannot engage in conversation or address the subtleties or complexities of students' questions. "It's simply another learning resource," he said. ■

—INGRID HEGGOY AND CHRISTINE HURLEY DERISO

TEACHING GOES HI-TECH

Faculty members in several departments at the Medical College of Georgia are incorporating computers into both classroom and clinical teaching. Examples include:

1 Ophthalmologists Keith Green, Malcolm Luxenberg and David Hull are working with researchers at the Georgia Institute of Technology to create a computerized simulation of eye surgery that physicians and residents can use to practice new procedures. They look through the eyepiece of a stereo operating microscope and see a three-dimensional photographic image of an eye. As surgeons manipulate an instrument connected to the computer that feels like a surgical instrument, they immediately can see and feel their movements as they operate on the virtual eye.

2 Dr. R. Leon Longe in the clinical pharmacy program is working with Shawnee Sloop in the Computer Assisted Instruction Research and Development Group to create a pilot project for the doctor of pharmacy students' physical assessment class. If students find it helpful, he hopes to secure funding to expand the project.

3 A self-guided, interactive medical ethics tutorial is being developed by Dr. Richard Martin in the Department of Humanities, Dr. Andy Reese, associate professor of immunology and microbiology and graduate fellow John Baros-Johnson. "The program helps the student consider ethical and legal choices, counseling skills and professional standards in making difficult choices that are the kinds of decisions physicians have to make," Dr. Martin said.

4 Dr. Reese is developing a multimedia textbook, *Essentials of Medical Immunology,* which is patterned after Dr. Nosek's physiology textbook. It includes text, graphics and animation and is designed to be used in conjunction with the immunology section of the microbiology course.

5 Dr. Cynthia David and other physical therapy faculty members have developed several computerized teaching aids for students. *Muscles in Motion* is a self-guided tutorial using text and graphics to explain how muscles move. A gait-deviations tutorial uses a computer and laser disc, allowing students to study and analyze gait deviations of patients who have had a limb amputated. "The tutorial presents a normal gait and different types of deviations, with accompanying information," Dr. David said. "The students can then test themselves on identifying different deviations, and the computer presents them in a random order, and provides immediate feedback to them." Faculty member Jan Dennis and Dr. David are developing a patient simulator, which allows students to electronically evaluate a patient for physical therapy and devise a suggested treatment plan.

6 Dr. David and members of the Department of Physical Therapy have developed several educational games for students. A game based on the television show, *Jeopardy!,* helps students review information from several classes before tests. Faculty members also are creating an interactive computer game in which students use their knowledge of neuroanatomy and physiology to navigate inside a body and determine the patient's problem.

7 Dr. Eugene Binet, chairman of the Department of Radiology, and his colleagues are developing a specialized radiology knowledge resource that will allow radiologists, residents and students to gather more information about a diagnosis, study high-quality file images of various problems, use the program to expand their range of expertise and even use the computer to help determine possible diagnoses.

8 Dr. Casimir Eubig, a faculty member in the Section of Medical Physics, and other members of the section have created a radiology "computer tutor," titled *Basic Principles of Nuclear Imaging.* The 10-chapter multimedia textbook is geared for medical students, residents, nuclear medical technologists and others in the field, and combines text, sound, animated graphics and digitized movies. It begins with basic atomic and nuclear physics and progresses through specific information for a wide variety of radiological equipment. It includes text, computerized labs that let the student experiment with different exposure settings on equipment and tests to determine if the student understood the information. ■

—INGRID HEGGOY

partnerships!
Get a Completely Different View of partnerships . . .
and overhead. . . and paperwork. . . and red tape. . .
Since 1979, the Interim Physicians® nationwide network has been taking the hassles out of practicing medicine.
Whether you're seeking valuable locum tenens experience or you require the expertise of our personalized locum tenens, we have a leg up on the competition!
• no piles of paperwork
• all credentialing
• complete referencing
• malpractice insurance
• assignments at home or across the country
• unlimited practice settings
Reach for the Top in Your Health Care Goals!
Call today!
1•800•395-4212
Interim PHYSICIANS®
A Locum Tenens Network
© Copyright 1994, Interim Services, Inc

MORE

OF A GOOD THING

A man-made version of the 'good' cholesterol, HDL, appears to help protect the body against life-threatening infections much like human HDL protects the body from cardiovascular disease, according to research at the Medical College of Georgia.

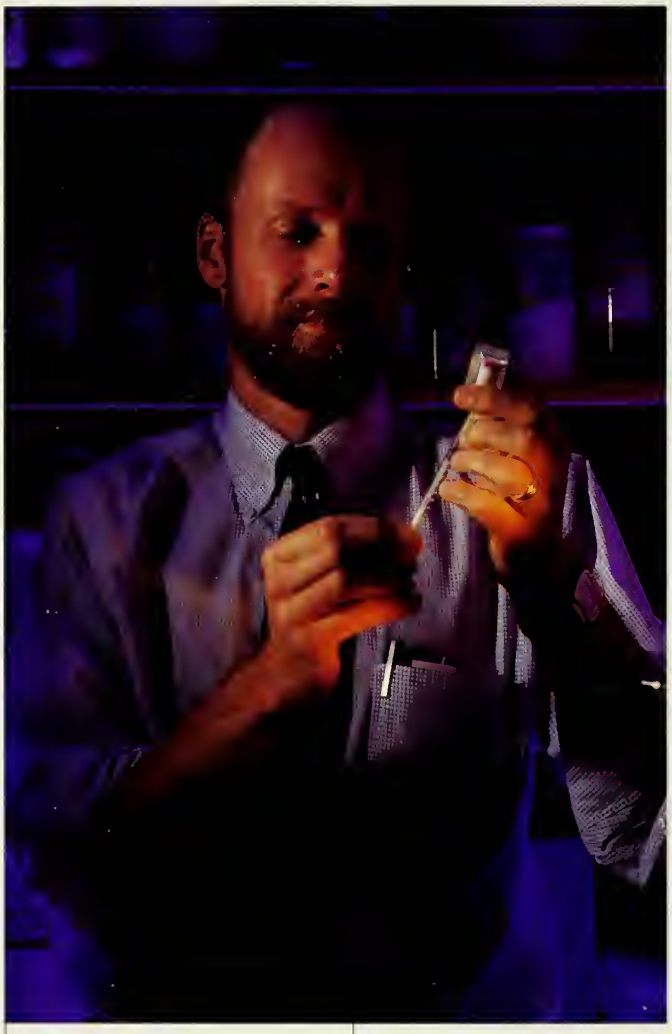
MCG researchers gave reconstituted high-density lipoprotein made by the Swiss Red Cross to laboratory rabbits exposed to a toxin commonly found in patients with major infections.

"This toxin can make you very sick. It can lower your blood pressure, make your heart speed up, give you a temperature, give you an elevated white count—all signs of an inflammation," said Dr. Jorge I. Cue, MCG trauma surgeon. In victims of automobile accidents, gunshots, burns and other severe injuries, severe infections can make the difference in survival.

In the MCG study, infection was avoided or minimized in animals that received reconstituted HDL before exposure to the toxin. Study findings were published in a recent edition of *Archives of Surgery*.

Reconstituted HDL "acts like a sponge for bacterial toxins," said Dr. Joseph T. DiPiro, doctor of pharmacy and director of research for the MCG Department of Surgery. HDL is found naturally in the bloodstream and in higher

Dr. Jorge I. Cue



Dr. Joseph T. DiPiro

levels in certain people, such as those who exercise vigorously, don't smoke and/or eat well. HDL is believed to carry cholesterol away from the arteries and to the liver for elimination. Laboratory studies in culture dishes and limited animal studies suggest that HDL might do the same to toxins in the body.

To find out more, the doctors gave doses of the reconstituted HDL to the rabbits over a 10-minute period, then started a three-hour infusion of a toxin called lipopolysaccharide. This toxin is found routinely in patients whose infections worsen and spread throughout the body.

Victims of major trauma are at increased risk for infection because of the dirty environment in which they may be injured, such as the streets. Also, ironically, they may become infected by the invasive medical treatment used to save their lives, such as multiple operations and intravenous blood and fluid lines. Today, doctors try to keep wound areas clean and give antibiotics in an attempt to keep infections from beginning and spreading.

Drs. Cue and DiPiro hope reconstituted HDL may prove an additional weapon in the fight to prevent or minimize infection. "This could be a pretreatment for trauma patients or a treatment for patients who become septic," Dr. Cue said.

Further animal studies and clinical trials are needed to clarify the role of reconstituted HDL in fighting infection and to see if it must be given before the infection to work or if it is just as effective given after symptoms begin, Dr. Cue said. ■

—TONI BAKER

AIM HIGH

CREATE A MEDICAL BREAKTHROUGH.

Become an Air Force physician and find the career breakthrough you've been looking for.

- No office overhead
- Dedicated, professional staff
- Quality lifestyle, quality practice
- 30 days vacation with pay per year

Today's Air Force provides medical breakthroughs. Call

USAF HEALTH PROFESSIONS
TOLL FREE:
1-800-423-USAF

AIR FORCE

Experience the Real Florida!!
Family Practice In Rural North Florida

Tallahassee Memorial Regional Medical Center offers practice opportunities for family physicians in its expanding network of rural practices located in the beautiful Big Bend area of north Florida.

Practice family medicine among small town charm, near unspoiled beaches, world-class fishing, hunting and national championship collegiate sports.

For more information write to or call:
Michael K. Magill, M.D., Senior Vice President
Medical Education and Outreach
Tallahassee Memorial Regional Medical Center
1221 Hodges Drive, Room 1105
Tallahassee, Fl 32308
Phone: (904) 681-5286

TALLAHASSEE MEMORIAL
REGIONAL MEDICAL CENTER

AlumNews

President's Reception during Homecoming 1994.

5 Presented Outstanding Faculty Awards

Christine Hurley Deriso

The Medical College of Georgia presented Outstanding Faculty Awards to faculty from each of the university's five schools during its May 19 faculty assembly.

Jancis K. Dennis, associate professor of physical therapy and director of the Center for the Study of Physical Therapy Education, was honored by the School of Allied Health Sciences. Ms. Dennis, who earned a master's degree in applied science from the Lincoln Institute of Health Sciences in Melbourne, Australia, joined MCG as an assistant professor in 1986 and was named associate professor in 1992.

Ms. Dennis is chair-elect of the School of Allied Health Sciences Dean's Promotion and Tenure Committee and has served on the school's Faculty Affairs Committee and Faculty Council. She is a member of the American Physical Therapy Association, Sigma Xi and the American Educational Research Association.

Dr. Carole M. Hanes, associate professor of pediatric dentistry and director of the Pediatric Dentistry Predoctoral Clinics, was honored by the School of Dentistry. Dr. Hanes, who earned her dental degree from the University of Louisville, joined the MCG faculty in 1986 as assistant professor of pediatric dentistry. She was named associate professor in 1990.

Dr. Hanes was named the Judson C. Hickey Distinguished Faculty Member for outstanding teaching by the classes of 1987 and 1992. She received the 1990 Georgia Society of Dentistry for Children Award for Teaching Excellence and is a fellow of the American Academy of Pediatric Dentistry and the American Society of Dentistry for Children.

Dr. Virendra B. Mahesh, Regents Professor and chairman of the Department of Physiology and Endocrinology, was honored by the School of Graduate Studies. Dr. Mahesh, who earned doctorates in organic chemistry and biological sciences from Delhi University in India and Oxford University respectively, joined the MCG faculty in 1959. He is director of MCG's Center for Population Studies and is a Robert B. Greenblatt Professor of Endocrinology.

Dr. Mahesh was awarded the School of Medicine Class of 1972 Best Teacher Award, the 1981 School of Graduate Studies Outstanding Faculty Award and the 1992 School of Medicine Outstanding Faculty Award. He was named International Man of the Year by the International Biographical Center in 1991-92 and Most Admired Man of the Decade by the American Biographical Institute in 1992.

Dr. Marshall B. Allen Jr., professor of surgery and chief of the Section of Neurosurgery, was honored by the School of Medicine. Dr. Allen, who earned his medical degree from Harvard Medical School, joined the MCG faculty in 1965. He is a past president of the Georgia Neurological Society and the Society of University Neurosurgeons.

Dr. Allen has served as president of faculty at MCG and as secretary and vice chief of staff of MCG's Executive Committee. He serves on MCG's Operating Room Committee, Student Educational Enrichment Program Committee, Ambulatory Care Committee and Hospital Laser Committee.

Dr. Joseph P. Maloney, associate professor in the Department of Adult Nursing, was honored by the School of Nursing. Dr. Maloney earned a master's degree in nursing from the University of

continued on page 24

Ms. Jordan Named Distinguished Alumna

Christine Hurley Deriso

The School of Allied Health Sciences Alumni Association honored Cheryl Leman Jordan as its distinguished alumna during Homecoming 1994 held April 28 through May 1.

Ms. Jordan, burn rehabilitation research coordinator and rehabilitation consultant at Washington Hospital Center in Washington, D.C., earned her bachelor's degree in occupational therapy from MCG in 1974. She earned a master's degree in exercise physiology and an advanced graduate degree from the University of Maryland.

Ms. Jordan lectures on burn rehabilitation principles and treatment at Howard University in Washington. She is a member of the American Burn Association, the International Society for Burn Injuries and the Maryland Occupational Therapy Association. ■

Edward D. Huechtker, vice president of the Allied Health Sciences Alumni Association, presents Distinguished Alumnus Award to Cheryl Leman Jordan.

Occupational Therapists Giving Toddlers A Head Start

Ingrid Heggoy

The room, with lots of swings suspended from the ceiling, soft cushions on the floor and balls, beanbags and other goodies scattered about, looks like heaven to a 5-year-old.

And it is a special place for those Richmond County students at the Silas Floyd Head Start program who come to the Ninth Street facility once a week for occupational therapy. On a recent spring day, Percy Davis happily solved a puzzle–helping the cat down from the tree–as Kathee Cammisa, Medical College of Georgia Department of Occupational Therapy faculty member, encouraged him.

Head Start is a federally funded program for disadvantaged preschoolers, designed to help prepare them to succeed in school. An MCG Department of Occupational Therapy program offers even more individualized attention to those who need it, and allows some of the children to catch up with their classmates.

The department's involvement with children at Head Start began several years ago, when department chairman Dr. Ricardo Carrasco began working with the program. Since then, three additional occupational therapy faculty, Ms. Cammisa, Lynn Jaffe and Dr. Carol Lee, as well as director of the hospital's occupational therapy clinic, Claudia Morin, also have become involved. And while Dr. Carrasco served as field work coordinator for the department, he helped organize pediatric clinical experience for MCG occupational therapy students through the program. Several students also have completed internships at Head Start.

"These are children who have problems that could potentially contribute to learning or emotional disorders," Dr. Carrasco said. "A small number of them are more severely disabled, with problems such as cerebral palsy or problems related to drugs or fetal alcohol syndrome."

Through a grant from the Indigent Care Trust Fund, the department has been able to increase the number of Head Start students who can receive occupational therapy. The case load in the CSRA-Equal Opportunity Authority Head Start program, which serves nine Georgia counties, including Richmond, has increased from some 35 students a year to approximately 100.

"We either see the children directly, meaning that we have appointments with the children, or we supervise their treatment indirectly, through consultation with teachers and aides, who then implement the program we design," Dr. Carrasco said. In addition, the project has screened many other Head Start students to determine if they need occupational therapy services.

"A big part of this therapy is that it should be fun, it should be challenging and the kids should

Dr. Larry Hornsby lectures during the School of Allied Health Sciences homecoming continuing education program.

For Physical and Psychosocial Challenges
Activities of Daily Living: Work, Play and Leisu
Use of Purposeful Activities
Cognitive, and Psychosocial

Dr. Nancy D. Prendergast, associate dean of the Department of Occupational Therapy, presents the first Nancy Prendergast Award to O.T. student Michelle Carr during the department's 20 - year reunion celebrated during homecoming.

get a real feeling of accomplishment," Ms. Cammisa said. "I get lots of cues from the children. I try to discover what they like and build on that."

Percy was more to the point: "I have fun," he said, smiling shyly, when asked if he liked to play in the room. He has many things to do when he comes here each week. In addition to the swings and balls, he enjoys playing matching and number games on a portable computer, loaded with kid-specific software. He and Ms. Cammisa also play jumping, tying, counting and word games.

Ms. Cammisa and several other MCG occupational therapy members treat about 25 children at the Ninth Street facility. "The realm of concern for occupational therapists is occupational performance—areas like work, leisure and self-care," Ms. Cammisa explained. "In children, that translates into functioning well in school, having the language and social skills to interact with teachers and classmates, tying their own shoes and so on."

The primary approach Ms. Cammisa and her colleagues use is sensory integration. "Sensory integration is how all of us put together the information that is coming in through our central nervous systems," Ms. Cammisa said. "For a simple example, take an orange—it looks a certain way, it feels a certain way, it has a certain weight and it smells a certain way. When I put all that together to know it's an orange, that's sensory integration.

"We work in ways that help the children organize their central nervous system response through play. For instance, instead of practicing balance, we might play on a swing or bounce on a ball. To improve language, we talk about what we're doing. Children learn through play."

The approach has made a difference for 4-year-old Mandy, according to Ms. Cammisa.

Mandy came in the door and took off her shoes, then headed straight for a big inner tube swing suspended from the ceiling and climbed on. When she'd had enough swinging, she let go and dropped to the mattress on the floor, with a big smile on her face. She ran over to a ball almost as big as she is and helped Ms. Cammisa pull it out to the middle of the room and began trying to climb on top of it.

Ms. Cammisa helped her up, and Mandy began bouncing. "You like bouncing, don't you?" she said. Mandy's reply was simple: "Bounce! Bounce!" As Mandy lay down on top of the ball, Ms. Cammisa carefully rolled the ball around, so sometimes Mandy was nearly standing up and sometimes was nearly on her head. "This is good for her balance skills," Ms. Cammisa explained. "She's being very brave today. She usually doesn't like to go upside down."

After some more play time, Mandy looked up and said, "Go, shoes?" Ms. Cammisa immediately responded to her: "Is it time to go? OK, go get your shoes and we'll put them on."

"Especially with children whose language isn't where we would like and who don't speak a lot, I try to encourage them to speak and I try to respond to what they do say, so they learn that their words have an impact," she explained. "I've seen a lot of improvement in Mandy over this year. For example, her language is much better than when she began the program."

"Depending on the specific problems of each child, when we see them early on, we have a better chance of helping them get caught up with their peers, and many of them can move on with their regular class," Ms. Cammisa said. ■

24 Allied Health Students Named to Who's Who

Twenty-four School of Allied Health Sciences students have been named to *Who's Who Among Students in American Universities and Colleges.*

Students are nominated by campus nominating committees. Editors of the directory choose who will be included based on academic achievement, community service, leadership in extracurricular activities and potential for continued success.

The allied health students are Allison Elizabeth Angel, James Eddie Bean Jr., AmyLee Brooks, Kay B. Caldwell, Michelle Charlene Carr, Aileen Pricilla Conley, Robert Russell Edwards, Charles R. Hall Sr., Karyn Handte, Carol J. Hogarty, Caroline Sharon Holley and Belinda E. Horton.

Also, Janet Melissa Horton, Sherri Levon Horton, Debra Hutto, Jane Louise Kleinpeter, Victoria S. Krepps, Cynthia Lynn Lightner, Ernest J. Neson, Amy Louise Portterfield, Deborah A. Roese, Jennifer Lynn Sedgeman, Susan Lynn Skrynecki and Catherine Yale. ■

Dr. McDonald Named Distinguished Alumnus

Christine Hurley Deriso

The School of Dentistry Alumni Association named Dr. Thomas Roy McDonald its distinguished alumnus during Homecoming 1994 held April 28 through May 1.

Dr. McDonald, a dentist in Athens, Ga., graduated from the MCG School of Dentistry in 1983.

Dr. McDonald received the Academy of Operative Dentistry Award for Outstanding Achievement in Operative Dentistry in 1983. He is a frequent lecturer in operative dentistry and crown and bridge at the MCG School of Dentistry and is a member of the American Dental Association, the Academy of General Dentistry and the Academy of Operative Dentistry. He is a past president of the Eastern District Dental Society. ■

Dr. Clepper Lectures at Hinman Meeting

Glenn Hudson

Dr. Douglas P. Clepper, assistant clinical professor of oral diagnosis and patient services at the Medical College of Georgia School of Dentistry, was a featured clinician lecturer for this year's Thomas P. Hinman Dental Meeting in Atlanta March 17-20.

Dr. Clepper discussed dental implants. He is widely recognized internationally as an expert on dental implants and has written and produced more than 60 educational videotapes on the subject.

Dr. Clepper graduated from Mercer University with a bachelor's degree in 1969. He graduated from the MCG School of Dentistry in 1973 and has been in private practice with West Augusta Dental Associates since 1973. ■

School of Dentistry Class of 1974 20-Year Reunion

Alum's Technique Helps Sealing Process

Glenn Hudson

Dentists agree that a proper seal is the single most important factor determining the success or failure of endodontic treatment. The problem is that you can't seal what you can't see.

Dr. David Dickey, a 1978 graduate of the Medical College of Georgia School of Dentistry, practices a technique that he says greatly increases the chance of successfully sealing a root canal or fracture in a tooth by using a microscope. "It improves your chances of success because it improves your ability to totally seal a canal space," said Dr. Dickey, a partner in Augusta Associates of Endodontics in Augusta.

Dr. Dickey, who learned the technique from Dr. Gary Carr in San Diego, is helping to pioneer adaptation of a microscope for use in the dental clinic.

"A microscope adapted to dentistry gives us improved visibility, superior lighting and improved confidence," Dr. Dickey said. "All this adds up to better technical skills. And when you have better skills, you are going to have better

Alumni Association President T. Barrett Trotter (right) presents Distinguished Alumni Award to Dr. Thomas Roy McDonald.

Dr. Van Haywood delivers lecture during School of Dentistry Alumni Association homecoming continuing education course.

results."

Dr. Dickey uses the microscope to improve his vision during a procedure and record the procedure for patient records and referring dentists. "We can make slides, videos or photographs to keep a visual record of the patient," said Dr. Dickey.

Another strong selling point for using a microscope is the quicker healing time, he said. Dr. Dickey uses the microscope when suturing a patient. The scope enables him to place the sutures away from the incision. After applying citric acid to the site to promote the growth of fibroblasts (large cells that promote the formation of fibers), Dr. Dickey can remove the suture 24 to 48 hours after surgery. He uses his feet to change magnification and focus, so his hands are free to work on the patient.

Dr. Dickey uses two dental assistants when using the microscope. One assistant uses a second pair of binoculars on the microscope to aid Dr. Dickey with suction while the other watches the procedure on a monitor and handles the dental instruments and supplies.

The microscope is also helpful during non-surgical procedures such as removing metallic obstructions, locating calcified canals and evaluating and confirmng fractures.

Dr. Dickey is a firm believer in the microscope for dental use, despite the $10,000 or more price tag. "In my mind, if someone was going to do an endodontic surgery on me, I wouldn't want it done any other way." ■

Dr. Myers Named Representative

Glenn Hudson

Dr. David Myers, dean of the Medical College of Georgia School of Dentistry, has been elected by the American Association of Dental School as representative to the American Dental Association Council on Dental Education and the ADA Commission on Dental Accreditation.

Dr. Myers' duties during his four-year term will include formulating national policies related to dental education and expediting the ADA accreditation process for U.S. dental schools.

Dr. Myers has been dean of the MCG School of Dentistry since 1989. ■

School of Dentistry Class of 1984 10-Year Reunion

School of Dentistry Class of 1989 5-Year Reunion

Dr. Brann Named to Editorial Board

Dr. Darrell W. Brann, assistant professor of physiology and endocrinology at the Medical College of Georgia, has been appointed to a three-year term on the editorial board of *Neuroendocrinology*, the premier journal for publication of basic and clinical studies on the relationship and interaction of the brain with the endocrine system.

Dr. Brann also has been invited to edit a book with Dr. Virendra B. Mahesh, Regents professor and chairman of the MCG Department of Physiology and Endocrinology, titled *Excitatory Amino Acids: Their Role in Neuroendocrine Function* by CRC Press. The book will include approximately 224 printed pages with chapters contributed by 12 leading experts in the area, including Drs. Brann and Mahesh. The book should appear in print in 1995. ■

Dr. Marshall Named Distinguished Alumnus

Christine Hurley Deriso

The School of Graduate Studies Alumni Association honored Dr. Dennis C. Marshall as its distinguished alumnus during Homecoming 1994 held April 28 through May 1.

Dr. Marshall, senior associate director of scientific affairs and clinical scientist in cardiovascular therapeutics for Pfizer International Inc., graduated with distinction from MCG Department of Pharmacology and Toxicology in 1984.

Dr. Marshall teaches a business management/strategy computer simulation seminar at Pfizer and teaches selected topics in pharmacology and physiology at Fairleigh Dickinson University in Madison, N.J. He was co-chairman of a neuroscience symposium at the 21st annual meeting of the Society for Neuroscience in 1991. He was a 1983-84 recipient of the MCG Faculty Wives Club's Research Scholarship Award. Dr. Marshall is a member of the American Association for the Advancement of Science, the American Heart Association and the Society for Neuroscience. ■

Dr. Dennis C. Marshall delivers Distinguished Alumnus lecture.

Medical Illustration Students Awarded

Four Medical College of Georgia medical illustration students received awards at the Second Annual Student Scientific and Medical Illustration Exhibition ceremony in January.

The award winners were Aisha Bhatti, first-place Stenstrom Award of Excellence for "Anatomy of the Coronary Arteries," Robert Finkbeiner, second-place for "Neuromuscular Junction," and Alexandra Webber, third-place for "Muscular Anatomy of the Shoulder." Honorable mention was awarded to Lynda Levy for "Renal Vasculature."

The exhibition was co-sponsored by the Scientific Illustration Division of the University of Georgia Department of Art and the MCG Department of Medical Illustration. ■

Graduate Students Honored for Research

Christine Hurley Deriso

Several Medical College of Georgia graduate students were honored recently for their research.

The students' research projects were judged by a faculty panel during Graduate Student Research Day Oct. 29, an annual event enabling undergraduates interested in science to tour the institution and for MCG graduate students to present their research.

Winners of Excellence in Research Awards, their departments, their research titles and faculty advisers are:

- Hsi Chiao; pharmacology; "Local Cardiac Effects of Substance P and its Role in Myocardial Dysfunction During Postischemic Reperfusion;" Dr. Robert W. Caldwell.
- Chih-Wei Chang; cellular biology and anatomy; "Cell Culture Model for Testing Permeability of Retinal Pigment Epithelial Cell Barrier;" Dr. Ruth Caldwell.
- Vallire Hooper; graduate nursing; "Use of a PACU Pain Assessment Tool: A Pilot Study;" Dr. Virginia Kemp.
- Gloria Mora; endocrinology;

"Androgen Regulation of ARmRNA in Rat Ventral Prostrate is Protein Synthesis Independent;" Dr. Virendra B. Mahesh.

- Andreas Papapetropoulos; pharmacology; "Accumulation of Guanosine 3', 5'-Cyclic Monophosphate (cGMP) in Cultured Smooth Muscle Cells from Hypertensive and Normotensive Rats;" Dr. John D. Catravas.
- Jian Wei; pharmacology; "Alteration in the Expression of Central Muscarinic Receptors in the Spontaneously Hypertensive Rat;" Dr. Jerry J. Buccafusco.
- Venetia Zacharious, a pharmacology student, was awarded the Sigmi Xi Award for research titled "Kappa-opioid receptor stimulation inhibits substance P (SP) release in the dorsal horn both tonically and during a noxious thermal stimulus," supervised by Dr. Barry D. Goldstein.
- John C. Morgan, a student in cellular biology and anatomy, won the August Roesel Award for research titled "A Strategy for Misexpression of N-Cadherin in the Developing Chicken Optic Tectum." His faculty advisors are Drs. Deni Galileo and Paul McNeil. ■

Fetuses May Hold Key to Scar-Free Tissue

Toni Baker

A Medical College of Georgia researcher is studying why a fetus heals without disfiguring, debilitating scars in search of information that could help children and adults do the same.

Experience has shown that the developing human fetus, up until the last few weeks before birth, heals without scarring, said Dr. Xiaoxing Gao, pharmacologist working in the MCG Section of Plastic Surgery.

Today's still experimental surgeries on human fetuses—for example, diverting an obstructed bladder, relieving increased brain pressure caused by hydrocephalus or repairing a hernia restricting normal lung development—have shown these fetuses tend to be born with no surgery scars.

Dr. Gao wants to know why. Her focus is on collagenase, an enzyme that controls collagen degradation. Collagen is the substance that gives skin its structure, but which also plays a role in the buildup of excess tissue that forms a disfiguring scar.

The body's initial response to injury is the redness and swelling of inflammation which in turn stimulates the release of growth factors. Growth factors stimulate skin growth and the formation of hyaluronic acid. The complete role of this hyaluronic acid is unclear; it's a sort of cement that helps give the skin structure, but it also may have a role in regulating the production of collagen.

One thing that is clear is that fetuses have higher levels of hyaluronic acid and lower levels of collagen than a child or adult. "My job is to find out why the ratio is different," Dr. Gao said. The answer may be different activity levels of the enzymes responsible for hyaluronic acid and collagen—hyaluronidase and collagenase, respectively.

Dr. Gao, who completed her doctoral work in pharmacology at MCG in 1991, already has documented that the amniotic fluid bathing the fetus contains something which stimulates the enzyme, collagenase.

"I want to find out how collagenase works in the fetus," Dr. Gao said. "Maybe collagenase activity is very high in a fetus and reduces the collagen levels," she said.

So she is studying animal models of the human fetus, measuring collagenase activity, looking at collagen content, hyaluronidase levels and more.

Carol Irwin serves up supper during homecoming fish fry for School of Graduate Studies.

Past research has indicated that fetuses skip the initial inflammation step of wound-healing altogether because researchers have been unable to document the existence of leukocytes, the major inflammatory cells.

But Dr. Gao is looking again at this phase of wound-healing.

"If you cut tissue, the tissue will give a response, whether it's very brief, maybe several minutes because of being a fetus, or several days," she said. "I really believe there is something there."

Amniotic fluid—which potentially exists in abundant amounts but today is simply disposed of after a baby's birth—may be the key and may contain substances that can be used to minimize or eliminate scarring, she said. ■

4 Graduate Students Included in Who's Who

Four students in the Medical College of Georgia School of Graduate Studies will be included in the 1994 edition of *Who's Who Among Students in American Universities and Colleges.*

Campus nominating committees and editors of the annual directory have included the names of the students based on academic achievement, community service, leadership in extracurricular activities and potential for continued success.

The directory, first published in 1934, includes students from more than 1,400 colleges and universities worldwide.

The students are Dr. Ayman M. Ali in oral biology, Aileen P. Conley in medical illustration, Gloria Mora in endocrinology and Hong Tan in biochemistry. ■

Dr. Mahesh Named to Committee

Dr. Virendra B. Mahesh, chairman of the Medical College of Georgia Department of Physiology and Endocrinology, has been appointed to the Public Affairs Committee of the Council of the American Physiological Society.

The council is the national organization for physiologists. Dr. Mahesh has been appointed to a three-year term, effective Jan. 1, on the council's public affairs committee which works to increase public awareness about physiologists. ■

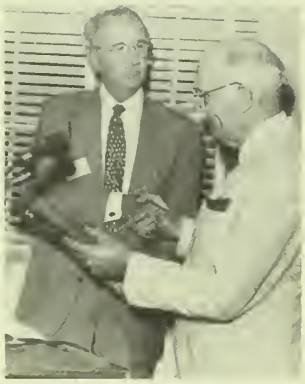
3 School of Medicine Alumni Honored

Christine Hurley Deriso

The School of Medicine Alumni Association presented an Award of Loyalty to Dr. A. Bleakley Chandler, an Award of Professional Achievement to Dr. Charles Dean Ray and a posthumous award to Dr. James B. Craig during Homecoming 1994 held April 28 through May 1.

Dr. Chandler, professor and chairman of the MCG Department of Pathology, earned his medical degree from MCG in 1948 and has served on its faculty since 1949.

He is a member of the School of Medicine Dean's Advisory Committee, the MCG Hospital and Clinics Executive Committee and the MCG School of Medicine Alumni Association. He serves on the North American editorial board of Pathology Research and Practice and is a member of the International Academy of Pathology and the International Society for the History of Medicine.



Dr. Roy Witherington presents School of Medicine Alumni Association Award to the son of the late Dr. James B. Craig.

Dr. Ray, associate director and chief of neuroaugmentive surgery and senior consult spinal neurosurgeon at the Institute for Low Back Care, graduated with honors and as the permanent class president of the MCG School of Medicine in 1956.

He is a staff neurosurgeon at Abbott-Northwestern Hospital in Minneapolis and Unity Hospital in St. Paul, Minn. Dr. Ray is founding chairman of the board and past president of the North American Spine Society. He serves on the editorial advisory board of the journal, *Spine*, and is a member of Alpha Omega Alpha (the honor medical society) and Sigma Xi (the honor science society.)

Dr. Craig, who died in 1990, was a 1937 graduate of the MCG School of Medicine. His psychiatry career included private practice, directing medical services for the Georgia Department of Human Resources' Division of Mental Health and Mental Retardation, and serving as forensic consultant at Central State Hospital in Milledgeville, Ga.

He was a life fellow of the American Psychiatric Association and was a member of the American College of Psychiatry and the Medical Association of Georgia. He was named Man of the Year in Psychiatry by the Georgia Psychiatric Association in 1973. ■

Dr. Witherington presents Distinguished Alumnus Award to Dr. A. Bleakley Chandler Sr.

Dr. Witherington presents Distinguished Alumnus Award to Dr. Charles D. Ray.

MCG Medical School Ranked 12th in National Survey

Christine Hurley Deriso

The Medical College of Georgia is the 12th-highest ranked comprehensive medical school in the United States, according to the March 21 edition of *U.S. News and World Report*.

The national news magazine annually publishes survey results ranking U.S. graduate schools. The 126 medical schools included in this year's survey are ranked in two categories: research-oriented and comprehensive (those more oriented toward training primary-care physicians.)

Rankings are based on criteria such as student profiles, faculty-to-student ratios, and the opinions of deans, senior faculty and directors of intern-residency programs.

This is the second year in a row that MCG has been listed as a top-20 comprehensive medical school nationwide.

"This survey represents national recognition that we are doing an excellent job in medical education," said Dr. Darrell G. Kirch, dean of the MCG School of Medicine. "Our peers see us as a school that produces physicians of the highest quality.

"It is especially gratifying that this survey reflects the opinions of our colleagues throughout the country. We were ranked equally high both by leaders of medical schools and by training-program directors, who see our graduates in action."

The ranking "validates our continuing commitment to enhance health care for the citizens of Georgia," said Dr. Francis J. Tedesco, president of MCG. "We're delighted when outside peers recognize

the quality of our programs and the contribution we make to graduating quality physicians."

MCG's stature affects not only the health-care field, but the economy of the community and the state, according to Dr. James B. Osborne, vice president of university advancement at MCG. "The quality of our institution and the professionals we produce have a direct and tremendous impact on the economic development of the state," he said. ■

A portrait of Dr. Walter G. Rice, a former School of Medicine dean, was unveiled during homecoming by Alumni Association President Dr. Chappell Collins (left) and MCG President Francis Tedesco. The alumni association commissioned artist David Mascaro to paint portraits of former deans. (Far right: Dr. Walter G. Rice)

12 MCG Doctors Included in "Best in America" Directory

Christine Hurley Deriso

Twelve Medical College of Georgia physicians are included in the second edition of *The Best Doctors in America* by Steven Naifeh and Gregory White Smith.

The authors, residents of Aiken, S.C., interview doctors throughout the United States and Canada to compile their list of exemplary physicians. One question asked of the doctors is, "If you had a friend or loved one in need of help in your specialty, and you couldn't do it, to whom would you send them?" The authors base their list on answers to those questions, plus other criteria including the stipulation that physicians included in the book must devote significant time to patient care.

The MCG physicians included in the publication are:

Dr. Joseph P. Bailey, a Charbonnier professor of medicine. Dr. Bailey's 40-year career as a rheumatologist has been devoted to helping patients overcome diseases such as arthritis and lupus.

Dr. Lawrence D. Devoe, director of maternal-fetal medicine. Dr. Devoe uses his expertise—including a computer program he helped develop—to guide high-risk obstetric patients through pregnancy and help bolster the odds of a happy, healthy outcome.

Dr. Donald G. Gallup, director of gynecologic oncology. Dr. Gallup's work with women's cancers includes his section's membership in the National Cancer Institute's gynecologic oncology group, which pools new research and treatment programs nationwide.

Dr. Frederick Kuhn, an otolaryngologist. Dr. Kuhn's specialization in sinus and nasal surgery includes treating deviated septums, nasal polyps, sinusitis, and benign or malignant tumors.

Dr. Paul G. McDonough, director of reproductive endocrinology. Dr. McDonough, whose titles also include clinical geneticist and cytogeneticist, helps determine the health of unborn babies and analyzes DNA to determine unknown genetic problems the body may harbor.

Dr. Leo Plouffe Jr., a reproductive endocrinologist. Dr. Plouffe offers technological hope to infertile couples striving for parenthood and directs MCG's premenstrual clinic.

Dr. Jeffrey L. Rausch, vice chairman of psychiatry and health behavior. Dr. Rausch tests antidepressants' varying effectiveness from one individual to the next, with the goal of targeting the most effective medication for each patient.

Dr. Michael Rivner, a neurologist. Dr. Rivner also is director of MCG's electromyography laboratory, which tests nerves and muscles. He has written a computer database for the field and runs the neurology department's computer network.

Dr. Kapil Sethi, a neurologist. Dr. Sethi researches movement disorders such as Parkinson's disease, including the use of botulinum toxin to treat them.

Dr. William B. Strong, Charbonnier professor and chief of pediatric cardiology. Dr. Strong is studying childhood habits that may translate into adult risk factors for heart disease.

Dr. Thomas R. Swift, chairman of the Department of Neurology. Dr. Swift's department has developed its own gene probe lab, and he oversees the group's many research projects.

Dr. Betty B. Wray, chief of the Section of Allergy and Immunology. Dr. Wray also is vice chairman of pediatrics, along with several other titles that attest to a productive 25-year career that has centered largely around treating and researching conditions such as asthma and allergies.

Also listed as *The Best Doctors in America* are three private practitioners in Augusta, including Dr. William H. Moretz Jr., an otologist whose now-deceased father, Dr. William Moretz Sr., was a former president of MCG. ■

Dr. Cohen Awarded Fellowship

Dr. David P. Cohen, a fellow in reproductive endocrinology at the Medical College of Georgia, has been awarded a Reproductive Scientist Development Program fellowship funded by the National Institutes

School of Medicine Dean's Reception during homecoming.

of Health.

The program supports physicians pursuing basic science activities. Dr. Cohen will study cell-signaling, the process of how cells communicate, in his two-year fellowship which begins July 1 at Cornell University Medical College.

Dr. Cohen earned his medical degree in 1988 from New York Medical College and completed a residency in obstetrics and gynecology at the State University of New York Health Science Center at Syracuse before coming to MCG for a two-year fellowship in reproductive endocrinology. He completes his training at MCG in June. ■

Dr. McDonough Named Chairman of NIH Committee

Toni Baker

Dr. Paul G. McDonough, professor and chief of the Medical College of Georgia Section of Reproductive Endocrinology, has been named chairman of the Selection Committee of the National Institutes of Health's Reproductive Scientist Training Program.

The program funds and facilitates five-year research training awards given annually on a competitive basis to three or four physicians specializing in the reproductive sciences who plan to pursue a career in academic medicine.

Dr. McDonough is a member of the National Advisory Board of Ethics in Reproduction and an ad hoc member of the NIH's Reproductive Biology Study Section. He is a member of the Reproductive Endocrine Division of the American Board of Obstetrics and Gynecology and former president of the Society of Reproductive Endocrinologists and the North American Society of Pediatric and Adolescent Gynecology.

Dr. McDonough is on the editorial board of the journals *Obstetrics and Gynecology, Genetica* and *Journal of Maternal-Fetal Medicine.* He has been associate editor of *Fertility and Sterility* for the past nine years and is editor emeritus of the *Journal of Pediatric and Adolescent Gynecology.* ■

Dr. Pund Receives Laureate Award

Dr. Ernest E. Pund, a 1955 graduate of the Medical College of Georgia School of Medicine, has received the American College of Physicians 1994 Laureate Award for Southern California Region III.

The Laureate Award honors fellows or masters of the college who have demonstrated excellence in medical care, education and/or research and community service. The award was presented at the college's Feb. 26 Southern California regional meeting in Palm Springs, Calif.

Dr. Pund earned a bachelor's degree from Emory University in Atlanta before enrolling in MCG, where he was elected to the Alph Omega Alpha Honor Society. He completed a residency on the Washington University Service at St. Louis City Hospital, followed by a cardiology fellowship at the University of Colorado.

He served two years in the cardiology division at the Balboa Naval Hospital in San Diego, then joined MCG's Department of Cardiology faculty for a year. He returned to San Diego in 1963, where he and a colleague founded the Specialty Medical Clinic of LaJolla.

In addition to his work at the clinic, Dr. Pund has been a clinical professor at the University of California's medical school in San Diego for 18 years.

Dr. Pund helped found the San Diego Society of Medicine and served as president of the California Society of Internal Medicine from 1974 to 1975. He is a past president of the Scripps Memorial Hospital medical staff and served a five-year term on the hospital board of trustees.

He has been a fellow of the American College of Physicians since 1969, has served on its Governor's Council since 1976 and served as governor of his region from 1984 to 1988. ■

Dr. Lesher Named Associate Councilor

Dr. Jack L. Lesher Jr., associate professor of dermatology at the Medical College of Georgia, has been named Georgia's associate councilor for the Southern Medical Association.

Dr. Lesher will help state councilor Terrell B. Tanner promote membership in the association and encourage participation in the group's educational, professional and practice-related programs and services.

The Southern Medical Association was established in 1906 to develop and promote continuing education programs for physicians with the ultimate goal of enhancing patient care. ■

2 Honored by Alumni Association

Christine Hurley Deriso

The School of Nursing Alumnl Association presented two awards during Homecoming 1994 held April 28 through May 1.

Diane Niedling Hilson received the E. Louise Grant Award, which honors an outstanding alumnus. Ms. Hilson, head nurse for a 32-bed adult medical-surgical unit at the MCG Hospital, earned a bachelor's degree in nursing from MCG in 1977 and a master's degree in nursing administration from MCG in 1990.

Ms. Hilson was named head nurse of the year by MCG in 1991 and received a "Nurse That Makes a Difference" Award by the Georgia Hospital Association in 1988. She is president of the MCG School of Nursing Alumni Association and is a member of the American Nurses Association.

Elizabeth Clark Till received the Phoebe Kandel Rohrer Founders Award for outstanding research and education. Ms. Till, a hematology/oncology clinical nurse specialist at the MCG Hospital, earned bachelor's and master's degrees from the MCG School of Nursing in 1976 and 1990, respectively. She has worked at MCG since 1973 and was certified an oncology nurse by the Oncology Nursing Society in 1988.

Ms. Till is a member of the American Nurses Association, the Oncology Nursing Society and Sigma Theta Tau. She is a past president of the MCG School of Nursing Alumni Association. ■

Diane Hilson

Critical-Care Nurses Rise to Challenge

Christine Hurley Deriso

Imagine that you've just been critically injured in a car accident. You're in the hospital, connected to a respirator, intravenous tube, heart monitor, and too many other contraptions to count, all with the express purpose of saving your life. Any fluctuation in your condition can mean life or death, and all you can do is lie there helplessly.

But you aren't alone. Someone is at your bedside, stroking your hand, peering at the monitors, adjusting equipment, murmuring words of encouragement and ready to spring into action should your condition become threatened.

That someone is a critical-care nurse. Critical-care nurses' contributions to health care were recognized during National Critical Care Awareness Week April 17-23, sponsored by the Foundation for Critical Care.

Nurses who work with critically ill patients are among the most vigilant members of the health-care community, said Meg Whitfield (BSN, '81 and MSN, '91), a critical-care nurse educator at the Medical College of Georgia. They have to be; a moment of distraction or indecisiveness can mean tragedy for their patients.

"I think the intensity is what sets us apart," said Diane Anthony, a clinical nurse intensivist for the medical intensive-care unit at the Medical College of Georgia Hospital."The nurse-to-patient ratio is much smaller (than in other fields)," said Ms. Whitfield. "There are generally no more than two patients for every nurse. We're pretty much there at the bedside all the time. We're always aware of what's going on with the patient."

In addition to clinical work, Ms. Whitfield teaches staff development courses and workshops related to critical-care nursing. "A lot of today's students take critical-care nursing in school, but we build on that," she said. "As nurses are in practice, they're constantly learning new information."

Her classes deal with topics as diverse as basic emergency skills, new policies and procedures within the field, technology and equipment within the field, and even nurse assertiveness.

The technology alone is daunting. "That can be kind of overwhelming," Ms. Whitfield said. "But we try to teach nurses not to just focus on the machines, but to focus on the patient. They shouldn't just let the equipment guide them."

Indeed, said Ms. Anthony, critical-care nurses and their patients develop a very intimate relationship—even if the patient is uncon-

scious. The nurse must be attuned to body language, facial expressions, changes in complexion and other indications of distress.

They also must know a lot about anatomy and organ systems, since their patients' injuries and illnesses cover the gamut, Ms. Anthony said.

As if that wasn't a tall enough order, critical-care nurses also must have impeccable communication skills. Their knowledge and observations about patients are extremely important to physicians.

"At MCG, you see lots of good examples of physicians and nurses communicating well," Ms. Anthony said. "Once physicians realize how well we know the patient and how concerned we are, they have a lot of respect for our opinions."

Critical-care nurses also must serve as liaisons to patients' families.

"Families are under so much stress in these situations, and they may have lot of unresolved fears," Ms. Anthony said. "You have to communicate with them to help them cope." She makes a point of getting to know family members right off the bat to establish trust and rapport.

She also sometimes faces the ultimate challenge: mourning the patient's death with the family. "I cry with families, but I don't hold on to that grief forever," Ms. Anthony said. "You have to move on to be of help to other families."

Ms. Whitfield discusses such emotional issues in her courses, as well as death-related issues such as living wills—legal documents expressing patients' desire to die without life-sustaining treatments that only prolong the process.

"There are a lot of questions about them. People ask whether living wills are honored or if family members can override them. Ten years ago, the issue was much grayer, but now people are understanding" that the documents are legally binding, Ms. Whitfield said.

Along with the stress of death, critical-care nurses also share in the joy of recovery. "My best gratification is just having a patient (who's been moved from intensive care to a private room) stop by and say he's doing well," Ms. Anthony said. ■

Dr. Sarah Gueldner delivers speech as guest lecturer during the 1994 School of Nursing homecoming dinner.

Nursing Researchers Pool Efforts

A group of nursing researchers has decided there's strength in numbers.

Nursing researchers from the Medical College of Georgia, the University of South Carolina at Spartanburg and Georgia Southern University have formed a research group to pool resources. The Qualitative Research Group currently is studying health and nursing issues associated with AIDS.

"We've formed a consortium that not only allows us to access each other's talents and interests, but increases our own ability to do research, because suddenly we've got a lot of help," said Dr. Joyceen Boyle, chairman of community nursing at MCG. "If we pool our efforts and data, we of course can accomplish things much more quickly."

Group members are Dr. Boyle, Dr. Lou Gramling and Rachel Muller from MCG; Dr. Donna Hodnicki from GSU; and Dr. Jim Ferrell from USC at Spartanburg. The researchers had collaborated informally before forming the consortium early this year. "We started saying to each other, 'What can we come up with that will combine all our talents and interests?'" Dr. Boyle said.

They realized that each individual project could enhance their own. For instance, one researcher has been studying homeless women; another has been studying the attitudes of incarcerated women toward AIDS; yet another has been researching AIDS patients' caregivers. The consortium was formed to adapt all the research to a particular format that could be easily accessed by members.

"We have the structure all set up and the Human Assurance Committee approval for several projects," Dr. Boyle said.

The five-member consortium meets at least monthly but generally more often. Master's and doctoral students who wish to participate in one or more of the projects are invited as well.

"This is a wonderful opportunity for those students," Dr. Boyle said. "They can sort of move in and out of that group, contributing to a piece of the work." The consortium enables the students to work within its structure rather than starting their research from scratch, she said. Students also can contribute to brainstorming sessions determining which aspects of AIDS research the consortium will pursue.

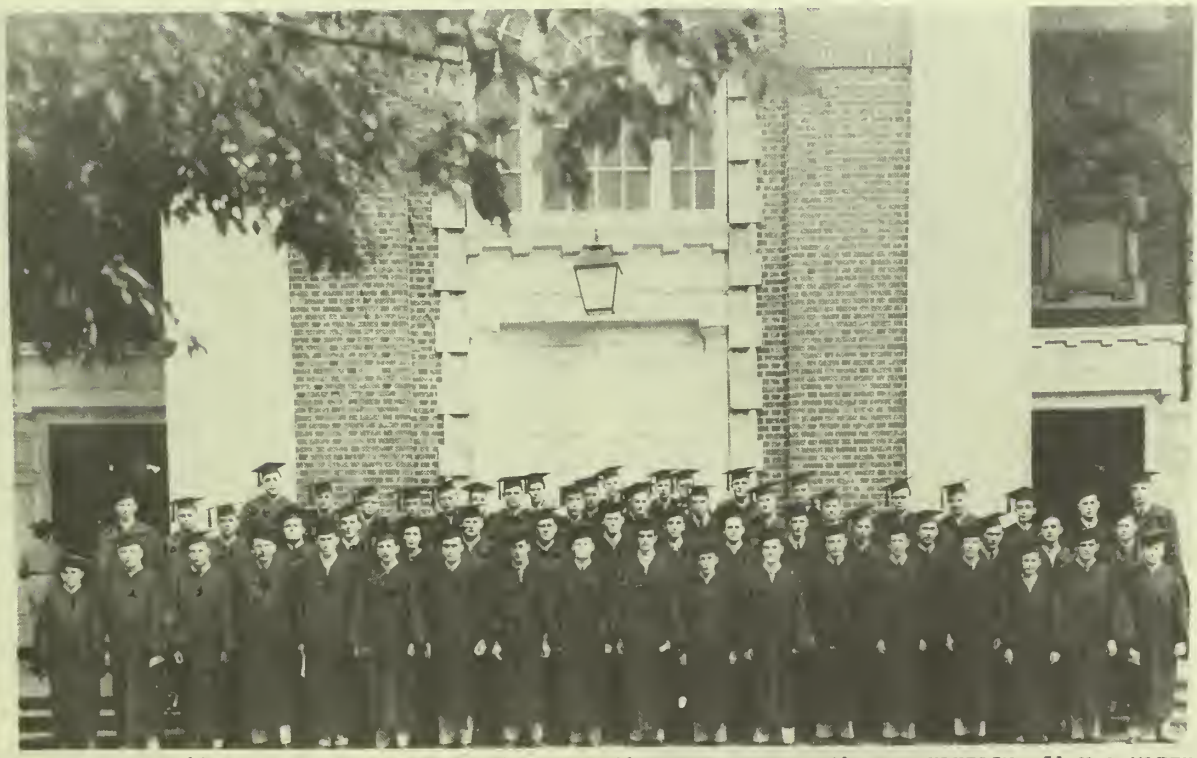
The consortium is pursuing external funding for several projects already off the ground. These studies include the physical and emotional toll of grandmothers caring for HIV-infected relatives; how cultural beliefs influence AIDS care-giving; and a longitudinal study of women with AIDS.

"We're finding as we've circled back to past research that many research participants who were HIV-infected in the '80s now have full-blown AIDS .It's been very interesting to collect longitudinal data and find out how the early disease compares with the later stages—how they've managed and what their lives have been like." ■

School of Medicine 1994 Homecoming Reunions

School of Medicine
Class of 1944
50-Year Reunion

School of Medicine
Graduating Class of 1944



1944

1. W.T.STEELE	11.L.E.ANTHONY	21.J.B.O'NEAL	31.H.C.DERRICK	41.J.L.MULHERIN	51.W.A.MATTHEWS
2. R.H.BRAMBLETT	12.W.O.WHITE	22.F.R.SANDERS	32.W.E.POUND	42.C.JOEL	52.J.S.ROBINSON
3. J.E.LEVER	13.J.M.BROWN	23.R.E.PERRY	33.M.A.BALDWIN	43.J.L.PARROTT	53.Z.E.GREER
4. T.H.MCGUIRE	14.H.G.JOINER	24.V.SUTTENFIELD	34.T.W.MIDDLEBRKS	44.H.B.LEE	54.E.V.PATRICK
5. J.L.DUNCAN	15.A.FISHER	25.L.H.PARRISH	35.A.W.BRAMBLETT	45.C.C.BENTON	55.H.A.BRIDGES
6. C.G.HAMES	16.O.F.DEEN	26.J.T.HARPER	36.I.BLUMENTHAL	46.E.C.BASS	56.A.P.PETWAY
7. W.H.GALLOWAY	17.E.B.BENSON	27.J.W.HURST	37.J.R.TURNER	47.W.S.MCCLELLAND	57.E.C.HOPKINS
8. J.M.BURDINE	18.R.C.MONTGOMERY	28.L.F.GIRTMAN	38.W.E.LEWIS	48.M.L.DAVIS	58.A.M.BATTEY
9. D.S.MANN	19.J.O.ELLIS	29.D.L.HEAD	39.H.B.DEAN	49.H.A.WASDEN	59 J.T.DUPREE
10.H.S.COLQUITT	20.F.E.DAVIS	30.R.H.STEVENSON	40.I.C.CASE	50.R.J.BROWN	60.C.L.DAVIS

School of Medicine
Class of 1949
45-Year Reunion

School of Medicine
Class of 1964
30-Year Reunion

School of Medicine
Class of 1954
40-Year Reunion

School of Medicine
Class of 1969
25-Year Reunion

School of Medicine
Class of 1959
35-Year Reunion

School of Medicine
Class of 1974
20-Year Reunion

School of Medicine
Class of 1984
10-Year Reunion

School of Medicine
Class of 1979
15-Year Reunion

School of Medicine
Class of 1989
5-Year Reunion

...continued from page 9

Pittsburgh and a Ph.D. from the University of Maryland. Before joining MCG, he was an officer in the U.S. Army Nurse Corps.

Dr. Maloney has served as deputy chief of the Nursing Science Division at the Academy of Health Sciences in Fort Sam Houston, Texas, and as assistant chief nurse at the Letterman Army Medical Center Presidio of San Francisco. He helped lay the groundwork for the MCG School of Nursing's forthcoming nurse anesthetist program. ■

Class Notes

School of Graduate Studies

Charles M. Holsey Jr. (MS '89, Ph.D. '92) is assistant professor of biology at Chattanooga State University. He enjoys teaching microbiology and introductory biology.

Dr. Joyce Ann Guillory (Ph.D., '92), director of cancer prevention and awareness at Morehouse College of Medicine, was awarded the meritorious alumnus award from her undergraduate college, Prarie View in Texas. She was the first African-American to receive a Ph.D. in nursing from MCG.

Dr. Kenneth S. Korach (Ph.D., '74) was a recent co-organizer of a symposium on estrogens and the environment in Washington, D.C.

Melody Heffline (MSN, '90) is a clinical nurse specialist in the postanesthesia care unit and outpatient surgery of Richland Memorial Hospital in Columbia, S.C.—not Lexington, Ky., as was erroneously reported in the winter edition of *AlumNews*.

School of Medicine

Dr. William Pilcher ('86), Decatur, Ga., is a faculty member in the Emory University Department of Cardiology. He trained at the University of Alabama in Birmingham in internal medicine and at Emory in cardiology. He and his wife, Dr. Dreama Jenkins-Pilcher ('86), who will complete a residency in dermatology at Emory in July '94, have a son, William Cain Pilcher Jr., born Dec. 23, 1992.

Dr. Claude T. Su ('86), Savannah, practices cardiology and subspecializes in nuclear cardiology. He is board certified in internal medicine and cardiovascular medicine and is a fellow of the American College of Cardiology. He and wife Susan Aeger Su, M.S.N. (a former instructor in adult nursing at MCG) have two children, Laura Ling Su, 4, and Catherine Mei Su, 3.

Dr. J. Douglas Quarles Jr. ('87), Monmouth Jct., N.J., is completing a urology residency at Robert Wood Johnson University Hospital in New Brunswick, N.J., and is going into private practice in Aiken, S.C., in August 1994. He and wife Teresa had their fourth child in April.

Dr. Judith Lewis ('89), Toccoa, Ga., practices general internal medicine at the Toccoa Clinic Medical Association. She and husband Wendell Corey had their first child in April. ■

AlumNews

Editor Christine Hurley Deriso
Writers Toni Baker
Christine Hurley Deriso
Ingrid Heggoy
Glenn Hudson
Design Travis Tom
Photography Phil Jones

Deadline for submitting information for publication in the summer issue of Alumnews is August 15, 1994

Alumni! Let us know what's new with you by taking a moment to fill out this form. Also, please send us your curriculum vitae so we can keep your files up-to-date.

❑ Male ❑ Female

Today's date

Name

Phone

School graduated from

Degree Class year

Street address

City State Zip

❑ Check if new address

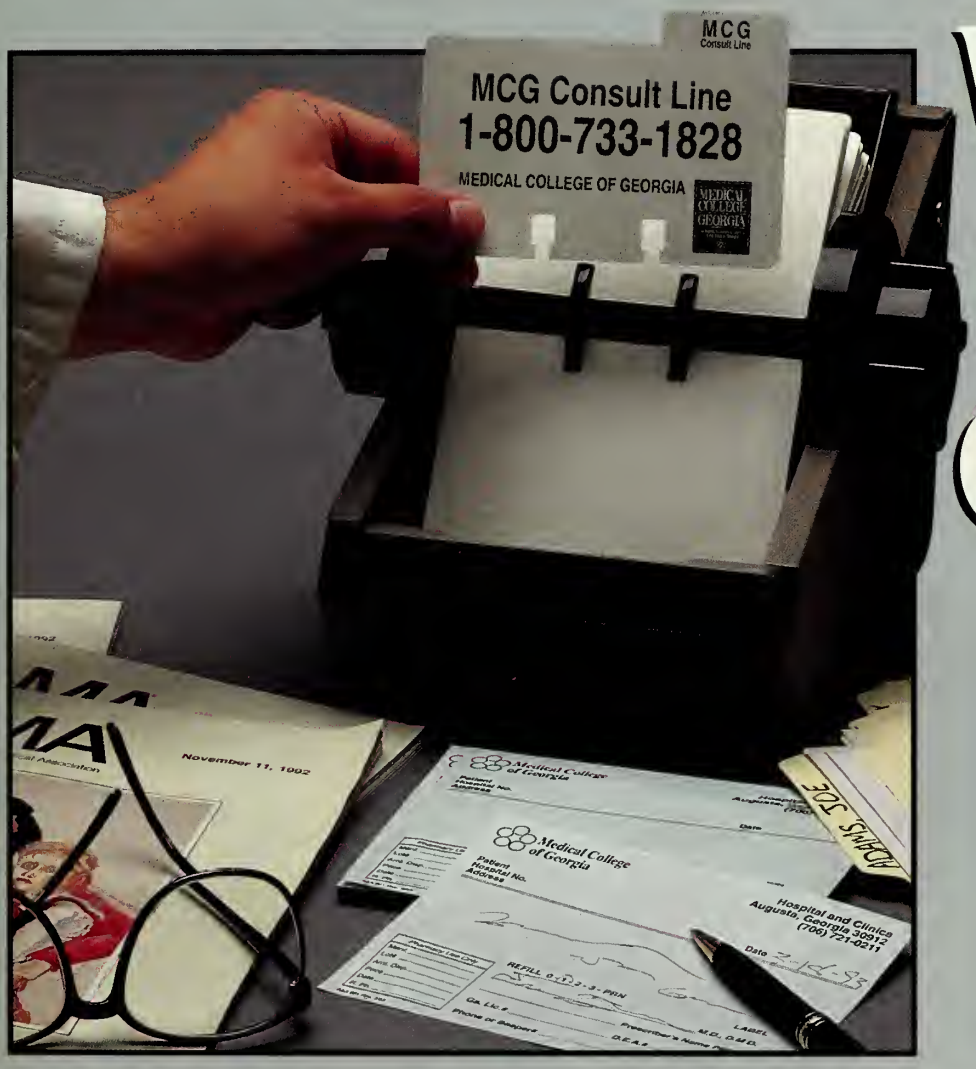
Present specialty and place of practice or training

Professional news (attach additional page if needed)

Personal news (b&w photos welcome)

Please send to: Christine Deriso; Alumni Center FI-100; Medical College of Georgia; Augusta, GA 30912

IF YOU'RE ON CALL WE'RE ON CALL.



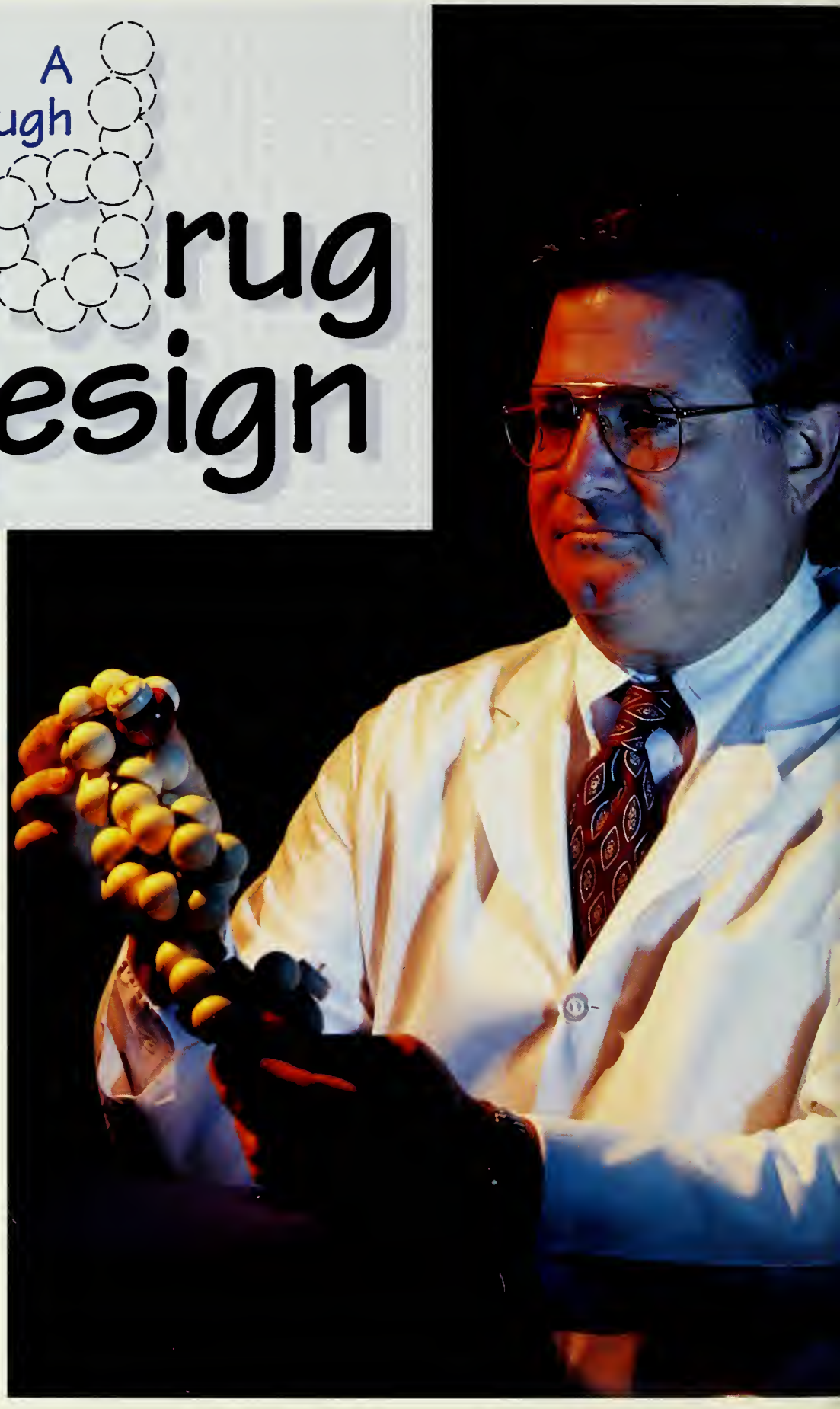
By calling the MCG Consult Line, you can consult with a faculty physician, request a referral, discuss new patient care techniques and recent research findings, or even inquire about continuing education opportunities.

Your call will be answered 24 hours a day by a physician consultation specialist who will promptly connect you with the physician, service or department of your choice. If you do not know which physician or service to ask for, the specialist will assist you in identifying the appropriate MCG resource.

THE MEDICAL COLLEGE OF GEORGIA
The Health Sciences University of the State of Georgia

1-800-733-1828

A Breakthrough in Drug Design



Drug development is nothing if not a test of patience and fortitude.

Consider the process of introducing a new drug to the marketplace:

Once researchers develop a compound, countless variations of it must be tested to identify the most effective drug. Then, the drug is subjected to years of stringently controlled testing. If the tests validate the drug's effectiveness, it *might* make it to the marketplace—dependent every step of the way on the highly uncertain ability to obtain funding. Even after a drug has been marketed, unanticipated side effects or toxicity might force it off the shelves and doom it to oblivion. The pharmaceutical company which has developed and marketed the drug is at that point millions of dollars poorer; the researcher has little to show for years of work; and the public may have suffered from the drug.

But what if...?

What if the trial and error of drug development could be eliminated, lopping possibly

years off the research phase? What if the drug's action and effectiveness could be guaranteed? What if toxicity and side effects could be largely eliminated?

If such musings seem purely academic, a researcher at the Medical College of Georgia begs to differ. Dr. Lawrence Hendry has created a method of drug development which may transform such fantasies into reality.

His work began some 20 years ago. Dr. Hendry, associate professor of physiology and endocrinology at MCG, serendipitously observed in 1975 that DNA—the nucleic acid bearing the genetic code for each living cell—has spaces within its looped structure into which other compounds fit precisely. He created models of such compounds, enabling him to match the pieces of the puzzle. For instance, he's found that the compound, estrogen—a female reproductive hormone—fits exactly into a DNA model.

He theorizes that receptors enable compounds to bind with the DNA and set their action into motion.

Dr. Hendry, who designs and develops drugs in collaboration with researchers from MCG and the University of Georgia, has discovered that developing synthetic compounds that fit into the DNA holes ensures their effectiveness. His discovery eliminates the need to try countless combinations before stumbling onto an effective drug and enables scientists to zero in on exactly what they need.

"This research has very substantial implications for how hormones and drugs work," said Dr. Ted Bransome, professor of medicine and physiology/endocrinology at MCG. Dr. Bransome is a co-inventor of Dr. Hendry's original methodology for predicting drug activity based on DNA structure. The methodology—known as stereochemical complementarity to gene structure—was patented in 1984.

"The blueprint for the action of any molecule can be discerned in the structure of genes," Dr. Bransome said. "What's very new about this whole idea is that it is possible to look at gene structure and figure out what the rules are."

Dr. Hendry and his colleagues are synthesizing drugs that mimic the action of compounds such as estrogen (drugs known as agonists); drugs that alter or prevent the action by fitting the DNA holes in a slightly different way (antagonists); or drugs that multiply the action of compounds (super agonists).

For instance, Dr. Hendry recently patented an estrogen antagonist that could be an effective treatment for breast cancer.

Scientists know that estrogen is linked to breast cancer, but current anti-estrogen therapies have limited success in treating it. Early tests show that Dr. Hendry's compound, which prevents estrogen activity and has very low toxicity, might halt the disease.

"It looks as though the drug is at least as effective, and probably more so, than Tomoxifen (the most effective drug to treat breast cancer to date)," said Dr. Bransome. "And this drug should have almost no side effects. Tomoxifen has many."

"The compound was 100- to 300-fold more active (than the natural compound the synthesized version improved upon)," said Dr. Virendra B. Mahesh, Regents Professor and chairman of the Department of Physiology and Endocrinology. Dr. Mahesh's lab measures the biological activity of several of Dr. Hendry's compounds, including this potential breast-cancer treatment.

The drug hasn't yet been tested for toxicity, but "it has a very high probability of having very low toxicity," Dr. Mahesh said.

Dr. Hendry's tests with super agonists—drugs that simulate compounds such as estrogen but make them sev-

The new KODAK SURECELL™ Strep A Test Kit. Rapid diagnostic testing with true built-in controls. For truly accurate, precise test results. Call for more information or a demonstration.

RAPID STREP A TESTING FROM KODAK

1-800-33KODAK

PRODUCTS BY Kodak

KODAK and SURECELL are trademarks. © Eastman Kodak Company, 1988

Move to Atlanta and enjoy all that a vibrant and growing metropolitan area like Atlanta has to ofer your personal life and medical career.

Join us and enjoy private family practice as it was meant to be. Practice family medicine your way in your own practice, but without the everyday hassle of managing people, CPT codes or loads of paperwork. Sound like what you're looking for? Then call me, Kathy Nelson, at 1-800-251-6744 or (404) 642-6744 or fax your CV to (404) 642-7286.

AFTCO Associates
1176 Grimes Bridge Road
Suite 100
Roswell, Georgia 30075

Memorial Medical Center, Inc.

MEMORIAL MEDICAL CENTER, INC.
SAVANNAH, GEORGIA

Memorial Medical Center, Inc., a 530-bed tertiary care and teaching hospital has the following opportunities available:

- **Family Practice/Primary Care**
  - **Outpatient Clinics**
  - **Locum Tenens**
- **Psychiatry**
  - **Medical Director of Adult Services**
  - **Group Private Practice**
  - **Staff Position**

If you are interested in a beautiful and historic costal community, send you CV to: Tod Hill, Physician Recruiter Consultant, MSO, P. O. Box 23089, Savannah, GA 31403-3089. If your specialty is not listed above and you are interested in Savannah, please send your CV. Our specialty needs are very dynamic and we want to include you in our recruitment process.

DeKalb Medical Center

ATLANTA - Opportunities exist for BE/BC physicians to join practices affiliated with DeKalb Medical Center in the following specialties:

- FAMILY PRACTICE
- DERMATOLOGY
- ENDOCRINOLOGY
- INTERNAL MEDICINE
- ORTHOPAEDIC SURGERY
- SURGICAL ONCOLOGY
- OB/GYN

For further information please contact: Pam Richards - DMC, Inc. 2701 N. Decatur Road, Decatur, GA 30033; 1 (800) 562-9721 or Fax CV in confidence to 1 (404) 501-5969.

eral times more potent—indicate effective treatments for conditions such osteoporosis, which is linked to an estrogen deficiency.

"What's intriguing about super agonists is that you can improve on the natural hormone," Dr. Hendry said.

The drug development process has been refined further still by creating models of compounds on a computer. "The computer takes a lot of subjectivity out of the work and enables very rigorous mathematical calculations that can help validate the work," said Dr. Hendry. MCG and the synthesis team, directed by Dr. David Chu at the University of Georgia, recently pooled two grants funded by the Georgia Research Alliance to upgrade the computer program and enable the researchers to instantaneously share and compare their results via modem. The new program is "about a thousand times faster" than the previous one, Dr. Hendry said.

This method of drug development has potentially countless applications, Dr. Hendry said, citing treatments for diabetes, depression and prostate cancer as just a few examples.

The results should be dramatic. For instance, Dr. Bransome, who studies and treats diabetes extensively, notes that "90 percent of anti-diabetic drugs subjected to animal and even human testing never make it (to the marketplace) because of side effects." An effective drug with few side effects would revolutionize the treatment of diabetes, he said.

Another example of the implications of this research is hyperthyroid treatment. Current drugs to treat hyperthyroidism (a disease with symptoms such as weight loss, rapid heart beat and irritability) "are awkward to take and have lots of side effects," Dr. Bransome said. The drugs also have limited effectiveness. If the thyroid antagonist developed via Dr. Hendry's technique proves successful, as anticipated, "it would take over the market."

Currently, drug companies invest some 10 years and some $300 million to get a single drug on the market, Dr. Bransome said. This new method of drug development should reduce both of those figures markedly—and ensure the drugs' effectiveness.

So why aren't pharmaceutical companies leaping onto the bandwagon?

"There is more and more recognition of this work, but at first, Dr. Hendry and his associates weren't believed," Dr. Bransome said. "This has the elements of a major scientific discovery, and the history of major scientific discoveries is that they are always resisted. I had hoped there would be more financial support by the pharmaceutical industry by now. On the other hand, I am still amazed at what the technology offers. The science has been startling and beyond what I imagined when we first began. This technology has the potential of coming up with drugs for which there is no counterpart."

The technique spurred the development of Stereochemical Genetics Inc., a company developed by MCG to link the research with the corporate world. But the company needs funding and is in the process of being adapted to allow outsiders to invest in it. Dr. Bransome, who serves on the board of trustees of U.S. Pharmocopeia, works to spread the word of the research outside the confines of MCG, and Dr. Hendry has lectured about his work internationally. The research also has been featured in scientific journals.

And Dr. Hendry feels confident that it is only a matter of time before the implications of this research are recognized. "I'm optimistic," he said. "I'm very measured and conservative in anything I say scientifically, but I must say the discoveries we've made and the excitement they're generating are starting to mushroom." ■

—CHRISTINE HURLEY DERISO

The experience of a nationwide laboratory.

Wouldn't it be great if you could enjoy all the advantages of a nationally accredited testing laboratory-right here in your own neighborhood? Well, you can.

SmithKline Beecham Clinical Laboratories (SBCL) in Georgia is part of the nation's largest full-service clinical laboratory network. Over 120 MDs and PhDs offer personal consultations nationwide. That's expertise you can trust.

As with all our Patient Service Centers, our Georgia facilities are staffed by highly trained phlebotomists. And convenient hours make scheduling easy. We provide 24-hour turnaround time on most routine tests.

Nationwide laboratory experience and local lab convenience. Now Georgia can have it both ways.

SB
SmithKline Beecham
Clinical Laboratories

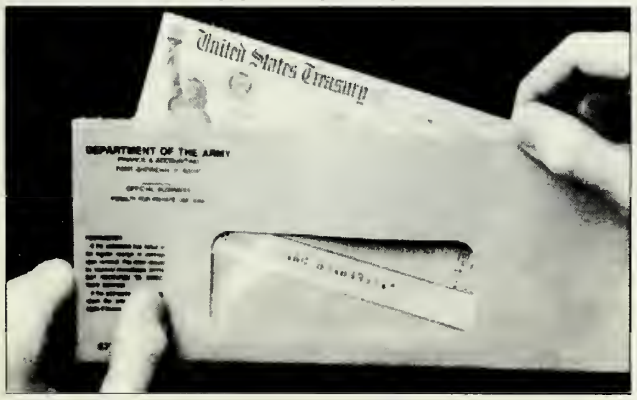
SmithKline Beecham Clinical Laboratories—Atlanta
1777 Montreal Circle, Tucker GA 30084 • 1 800 767 7525

The convenience of a local lab.

© 1990 SmithKline Beecham Clinical Laboratories, Inc.

SURGEONS: COULD YOU USE AN EXTRA $9,000?

If you're a resident in surgery, the Army Reserve will pay you a yearly stipend which could total in excess of $9,000 in the Army Reserve's Specialized Training Assistance Program (STRAP).



You will have opportunities to continue your education and attend conferences, and we will be flexible about scheduling the time you serve. Your immediate commitment could be as little as two weeks a year, with a small added obligation later on.

Get a maximum amount of money for a minimum amount of service. Find out more by contacting an Army Reserve Medical Counselor. Call:

CALL COLLECT: 404-362-3374 OR 404-363-5646

ARMY RESERVE MEDICINE. BE ALL YOU CAN BE.®

A MEETING OF Minds

Dr. Evan Torch, a man intrigued by the elements that combine to shape a mind and a soul, probably ascribes a certain symmetry to his personal evolution.

His mother is a pianist, his father an engineer. Their son embodies a tidy combination of those passions—poetry and pragmatism, boundlessness and precision.

"I don't know that I would have gone into medicine if it hadn't included psychiatry," said Dr. Torch, a 1976 graduate of the Medical College of Georgia School of Medicine. "Psychiatry combines my fascination with philosophy and the more human side of medicine with a strong interest in how the mind works. It's a perfect combination of art and science."

Dr. Torch meandered toward his medical degree, immersing himself in such undergraduate courses as philosophy, literature and music. "I was not one of these premed guys who sacrificed everything for it," he said. "I may have gotten into med school with less basic science than anybody in history."

But once he began medical school, his interests suddenly focused into sharp relief. His education and subsequent psychiatry residency at MCG were among the most memorable years of his life.

"Medical school at MCG, plus the best psychiatry residency you could get, are responsible for my ability to pursue what I want to pursue," he said.

His residency exposed him to an extremely wide gamut of clinical care.

"We got to see patients at every level of illness—not just the sickest patients. We learned how to actually talk to people. Even patients visiting Dr. Henry Cleckley, author of *The Three Faces of Eve,* allowed themselves to be interviewed."

He largely attributes the comprehensiveness of his education to Dr. E. James McCranie, chairman of MCG's Department of Psychiatry from 1957 to 1979. Dr. McCranie set a standard of great

humanity and compassion, Dr. Torch said, and urged his students to focus on patients rather than their diseases. (Dr. Torch recently contributed the funds to establish the E. James McCranie, M.D. Award Scholarship fund in his honor.)

Dr. Torch served briefly on the MCG faculty after his residency, then moved to Atlanta, where he established a private practice and was on the clinical faculty at Emory University.

During his practice, Dr. Torch has become particularly interested in dissociative, depersonalization and obsessive-compulsive disorders—illnesses he finds all the more fascinating because they simply reflect extremes of a continuum on which all humans are precariously perched.

"There may be a genetic predisposition, but these disorders are more linked to developmental than neurological problems," Dr. Torch said.

Ultimately, in fact, he thinks virtually all psychiatric disorders are at least as attributable to nurture as to nature. "I think the biggest mistake psychiatrists have made in the late 20th century is the arrogance they've shown assuming things based on the shape and configuration of the brain," he said. "The biggest favor we could do ourselves is admit how much we don't know about these things."

Dissociative, depersonalization and obsessive-compulsive disorders, for instance, represent different manifestations of a basic self-esteem problem (a theory based on Dr. McCranie's neurotic process theories), Dr. Torch said. Dr. Torch has helped refine the understanding and distinctions of all three, and he was one of a hundred researchers to participate in the First International Conference on Obsessive Compulsive Disorder in Capri, Italy in 1993.

Obsessive-compulsive behavior is now categorized as an anxiety disorder. The disorder, which generally begins in late adolescence or early adulthood, can include behaviors as diverse as obsessive counting or hand-washing, phobias, gambling and even pathological jealousy.

Such behavior generally can be traced in part to feelings of worthlessness, Dr. Torch said. "I think of obsessive-compulsive behavior as mental stuttering," he said. "These people are trying to do something that's overloading their nervous system, so the ritual becomes repetitive. The biggest problem with obsessive-compulsive patients is the unwillingness to lose control, to risk failure."

A sense of incompetence also characterizes other anxiety and depressive disorders.

Those who depersonalize and dissociate, for example, "can't concentrate or accept themselves for who they are," Dr. Torch said. "They become so focused on themselves and their imperfections that they sort of lose their identity. They feel they are observing themselves constantly, so their feelings are blunted. It's a feeling of not having unconditional acceptance for just being a basic self."

Such dissatisfaction can be debilitating in itself and can also lead to other neuroses, such as anorexia. "Anorexics become dissociated from reality; they stare at themselves so long in the mirror that they lose their perspective and begin to see themselves as fat."

Very sensitive people are at higher risk than others of anxiety and depressive disorders, but early development is the surest predictor, Dr. Torch said. Neglect, abuse, and other poor parenting techniques such as being overly controlling or critical can set the stage for battered self-esteem.

But when treating his patients, Dr. Torch focuses not on blame but on resolution.

"Every parent makes mistakes," he said. "A good therapist is supposed to help someone come to terms with his parents, not end up hating them."

He is dubious of such psychiatric techniques as hypnosis, which virtually eliminates the patient as a participant in the healing process, he said. And he reserves particular disdain for treating patients by focusing only on physiological characteristics of the brain.

"I just don't think that studying the brain in and of itself will lead psychiatrists to all the answers of behavior and what makes a person that person," Dr. Torch said. "To concentrate only on malfunctioning brain cells I think is a degrading and convenient way to deal with mental illness. No pill can completely help a person learn how to say 'no' or ask for acceptance."

He treats his patients primarily with psychotherapy, often including family members. "The beauty of psychotherapy is that you're treating people as human beings with some dignity," he said. Psychotherapy can last anywhere from months to years, as is often the case with obsessive-compulsive disorders, which tend to be harder to overcome than other anxiety disorders.

Dr. Torch acknowledges physiological aspects of mental illness and doesn't hesitate to prescribe medication, such as serotonin-effecting drugs, when necessary. He pilot-studied Anafranil, the first drug used to treat obsessive-compulsive disorder.

But he cautions against over-reliance on medication. "We know the drugs work, and we kind of know how, but certainly not exactly." Attributing miraculous powers to medication, and suggesting that they can be used as substitutes for the hard work of better understanding oneself, is a disservice to patients, he said.

Dr. Torch immensely enjoys the relationships he develops with patients over the course of treatment, and noted that such rapport is vital in the mental-health field. He is apprehensive that pending health-care reform might give short shrift both to ongoing physician-patient relationships and to mental health care. "I'm afraid that reform will result in more people being treated with pills and quick fixes."

But the price paid for overlooking their real needs would be disastrous, both individually and societally, he said. "Allowing people to free themselves from stress disorders can save society billions of dollars spent treating psychosomatic or psychophysiologic conditions."

Such costs result not only from the fact that mental illness can be debilitating in itself, but that it can lead to physical illness if untreated, he said. "We know that diseases such as cancer are related to the immune system, which is affected by stress."

He presses for increased mental-health funding every chance he gets, but the bulk of his time is spent doing what he loves best: working with patients. "I just couldn't have found a career that could make me more content," he said. "I love what I do—except for dealing with bureaucrats." ■

—CHRISTINE HURLEY DERISO

MORE THAN 12 MCG GRADUATES MAY KNOW SOMETHING THAT YOU DON'T

If you haven't already considered The Southeast Permanente Medical Group as your professional choice for a career, then more than 12 of your fellow colleagues and alumni know something you may not — they are part of the largest and most experienced managed-care organization in the country — **KAISER PERMANENTE.**

These MCG Physicians are contributing to the way health care is changing in the U.S. and they have established a successful group practice in one of our state-of-the-art, multispecialty medical centers throughout Atlanta's most desirable areas.

Did we forget to mention the attractive salary we offer in addition to comprehensive benefits, malpractice coverage, CME, vacation . . . and more?

If you are an **Internal Medicine** or **Family Physician** and you would like to find out more about what over 8,600 Permanente Physicians nationally find so attractive, then please contact Laurie Wehunt at: **The Southeast Permanente Medical Group, Office of Professional Recruitment, Nine Piedmont Center, 3495 Piedmont Road, NE, Atlanta, GA 30305. 800-877-0409. FAX: (404) 364-4792.** EOE/AA.

LOOK AHEAD TO YOUR FUTURE

KAISER PERMANENTE

Good People. Good Medicine.

FACULTY

Family Practice Residency Program

...on the lake
..near the mountains

Less than 2 hours from Augusta; about same from Atlanta, Charlotte. Expanding faculty in 24-resident community-based, MUSC affiliate at 587-bed hospital serving over 200,000 in NE Georgia and NW South Carolina. OB competence preferred. Teaching / clinical responsibilities. Fully accredited, stable program. Good compensation / benefits. Outdoor recreation, especially water sports on Lake Hartwell. 50,000 community, 25 miles from Greenville. James Buehler, MD., Director or Sherry Chastain, Project Coordinator. No search firms. (803) 224-8100 / 1-800 226-3103.

ANDERSON AREA MEDICAL CENTER

800 NORTH FANT STREET, ANDERSON, SOUTH CAROLINA 29621

Why One of the Best Doctors in His Field is in the Army Guard.

Dr. George Alexander is one of the leading cancer researchers at the National Institutes of Health. He is also a member of the Army National Guard. In fact, he made one of his greatest discoveries in a mobile combat hospital during a field exercise. As an explosion rocked the OR and he felt his skills stretched to the maximum, he discovered he was enjoying himself.

Lieutenant Colonel Alexander joined to serve his country and community one weekend a month and two weeks a year. In the Guard he has the challenges and experiences he could never find in a civilian hospital. He finds working with soldiers a deeply satisfying part of his medical career. He trains with them, lives with them, even parachute jumps with them. He has come to better understand his potential patients and how to implement preventive measures.

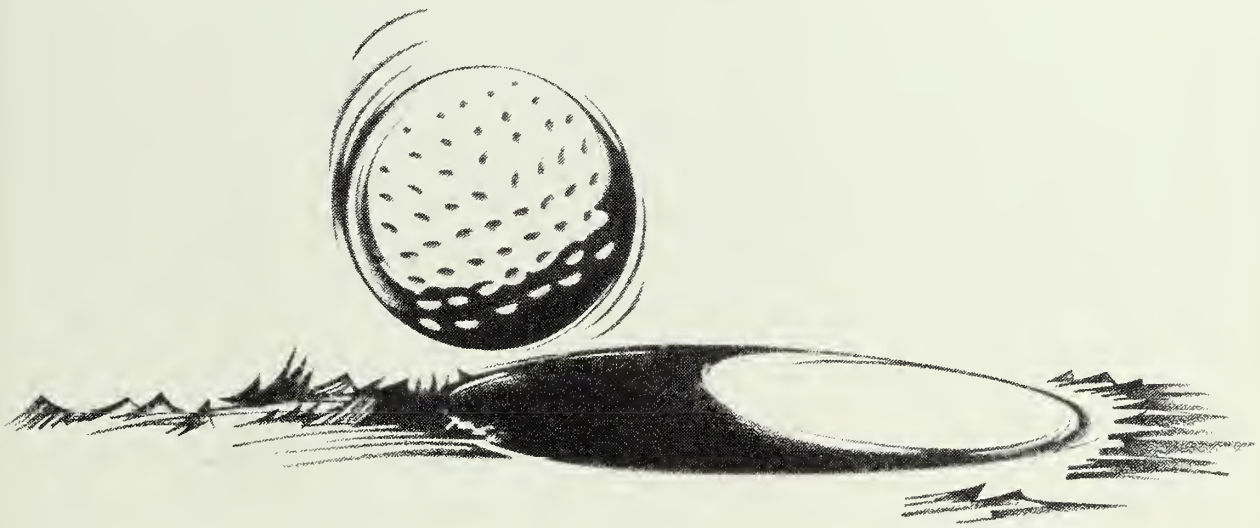
Sound interesting? Whether you're a doctor or still in medical school, call the Guard and find out about benefits including financial assistance for qualified residency and flexible time commitment. Contact Major Steve Kuhn at

GEORGIA NATIONAL GUARD

1-800-282-4222

Georgians At Their Best.

If Golf Had A Guarantee This Strong, Every Shot Would Be A Hole-In-One.



Everyone wins with Cellular One's® Guaranteed Service. It's a commitment to your satisfaction that starts the first day and continues month after month, call after call.

Only one company can make a promise like that – Cellular One. For information on cellular service that's guaranteed better than par for the course, call 1-800-727-CELL.

CELLULARONE®

A GTE *Service*

Medical College of Georgia
Division of Institutional Relations
Augusta, Georgia 30912

Non-Profit
Organization
U.S. Postage
PAID
Augusta, GA
Permit No. 210

4600
J. MALCOLM KLING, DVM
DIR RES SUP SRVS
RES SUP SRVS
CB-1327